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## ABSTRACT

This report of teacher supply and demand in Florida looks at measures of teacher shortages during the 1985-86 school year, compares the projected supply of teachers by subject field with the numbers needed during 1987-88, and then projects the demand for teachers through the end of the century. Also included are status reports on programs which have recently been initiated to offset teacher shortages. One issue discussed at length in this report is the proportion of Florida teachers completing their training outside the state; from 60 to 65 percent of Florida's teachers come from out of state. As emphasized in prior reports, the most important factor in teacher supply and demand in Florida over the next 15 years is the shift in the age distribution of the population. State forecasts indicate that during the next few years the schools can expect overall annual enrollment increases, with steady increases continuing until at least the year 2000. Appendices contain supplementary tables and copies of statutory measures for attracting teachers. (JD)

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# Teacher Supply and Demand In Florida:

## Fifth Annual Report

October 1986



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## EXECUTIVE SUMMARY

This report of teacher supply and demand in Florida looks at measures of teacher shortages during the 1985-86 school year, compares the projected supply of teachers by subject field with the numbers needed during 1987-88, and then projects the demand for teachers through the end of the century. Also included are status reports on programs which the State of Florida has recently initiated to offset teacher shortages.

### Current Teacher Supply and Demand

Three types of information are available within the Department of Education to help gauge the demand for new teachers in Florida: the number of fall vacancies, the annual number of teachers terminating employment, and the number of teachers teaching out of field.

Teacher vacancies at the beginning of the 1985-86 school year (7,993) represented 9.0 percent of the total number of teachers in Florida classrooms (88,973), about the same percentage as reported for 1984-85. This 7,993 total is an increase of less than one percent over the number of vacancies the prior year.

Demographics play an important role in determining the types of teachers needed. Increased enrollments at the kindergarten and first grade level created a 22-percent increase in the number of elementary teachers needed and an 8-percent increase in vacancies for exceptional education teachers. At the same time, fewer secondary teachers were needed than the year before.

The number of out-of-field teachers hired to teach exceptional education classes continues to increase. However, because fewer new teachers were needed at the secondary level during fall 1985, not as many vacancies in areas of critical need outside of exceptional education were filled by teachers certified in other fields. Thus, although the percentage of out-of-field teachers hired to teach science, mathematics, and foreign languages continues to be higher than in other fields, the percentages for 1985 were lower than those for 1984.

During 1984-85, the most recent data year, 2.0 percent of Florida's teachers retired, up from 1.5 percent the year before. It is unclear whether this increase is the beginning of a move upward in the percentage of teachers

... annually or whether 1984-85 was an atypical year. One out of ten of the teachers terminating each year cited "for other personal reasons." The number in this category for 1985-86 was 4,365, or 5.1 percent of all classroom teachers. It is estimated that a third of these resignations were for the purpose of relocating in another Florida school district. The rest of the resignations for personal reasons (from 40 to 50 percent of all terminations) represent teachers leaving the classroom short of retirement.

Based on information collected by course from each school in the state, during fall 1985 an estimated 4.3 percent of Florida's teachers were teaching out of field. This overall number seems to compare favorably with national estimates. However, within specific subject areas and specific districts the proportion of out-of-field teachers is significantly higher than 4.3 percent.

Teacher supply in this report is measured by the number of graduates of Florida teacher education programs and the number of candidates passing the teacher certification examination. Incomplete information is also available on the number of new teaching certificates issued.

Information taken from a survey of teacher education programs during 1985 showed fewer students graduated from teacher education programs in 1984-85 than the prior year. Modest increases are projected over the three-year period covered by the survey. Proportionally greater increases are projected for the fields with critical shortages, but such projected increases have frequently not been realized in the past.

During 1985-86, 8,962 persons passed all four parts of the Florida Teacher Certification Examination, an increase of 10.9 per cent over the year before. It is difficult to determine how much of this increase is indicative of increases in the actual supply of teachers since teacher candidates now tend to take the examination earlier in the preparation-certification process than they formerly did.

One issue discussed at length in this report is the proportion of Florida teachers completing their training outside the state. Based on certification statistics, earlier reports have repeated the oft-reported statement that from 60 to 65 percent of Florida's teachers come from out of state. Using other sources of information, this year's report suggests that this estimate be revised to 45 to 50 percent. Such an assumption would mean Florida has historically been able to provide a larger proportion of the teachers it has needed each fall than had been assumed. On

the other hand, looking at the future, accepting this new view would mean the state may have to depend more on its own resources to fill future vacancies than has been presumed heretofore.

### Future Supply and Demand

Looking ahead to 1987-88, this report makes projections of both the number of teachers needed (demand) and teacher supply. It estimates that during that year the state will need about 9,250 additional teachers. Florida teacher education programs expect about 3,525 graduates, with proportionally higher percentages of these graduates in noncritical fields than the proportion of vacancies in these same fields. If the same number of graduates were extended over the next fifteen years, this would total 46,500 teacher education graduates, compared to a projected number of 156,000 additional new teachers needed.

As emphasized in prior reports, the most important factor in teacher supply and demand in Florida over the next fifteen years is the shift in the age distribution of the population. State forecasts indicate that during the next few years the schools can expect overall annual enrollment increases of from 30,000 to 60,000, or from 2 to 3 percent, with steady increases continuing until at least the year 2000. Enrollments in grades K-12 are projected to increase by 42 percent in the fifteen-year period from 1985 to 2000. At the same time the number of 22- to 29-year-olds, the age group from which most of the new teachers come, are projected to decrease by 11 percent.

Forecasts indicate the period 1990-2000 will be particularly critical, since those years will see sharp enrollment increases in grades 7-12, the grades already experiencing shortages in specific subject fields, at the same time that the number of 22 to 29 year olds are declining significantly.

### Measures for Attracting Teachers

Beginning in 1983 Florida began to implement programs to offset teacher shortages, particularly in critical teaching areas. These programs included various teacher financial aid programs, an alternative certification program, and a teacher recruitment center. Although it is still too early to evaluate their effectiveness, the last section of this report provides a description and status report of each of the programs.



From 1983-84 through 1986-76 a total of 1,080 teacher scholarship loans have been awarded to 875 prospective teachers, most of whom are still in college. Of the 139 who have graduated and begun working, 51 percent are teaching and 45 percent have begun repaying their loans in lieu of teaching.

Fewer arts and sciences graduates (noneducation majors) have used the alternative certification route to qualify to teach than had been hoped. One reason is that medium-sized and smaller districts have found they lack the resources to provide the in-service needed for this program. Two recent changes in policy, plus expected shortages in the 1990s, may make alternative certification more attractive both to the school districts and to arts and sciences graduates interested in teaching.

The Teacher Referral and Recruitment Center provides a linkage between prospective teachers and school districts with teacher vacancies. It also encourages young people to choose teaching as a career through sponsorship of chapters of Future Educators of America. During 1985-86 the Center's most successful endeavor was a recruitment fair held in Orlando in June 1986. Some 1,500 applicants, as well as representatives of 43 school districts, attended the fair. By the end of the fair 244 teachers had signed contracts. By the opening of school as many as 650 additional contracts were signed by candidates interviewed at the fair. The Center plans to conduct a similar recruiting fair annually.



## INTRODUCTION

This is the Department of Education's fifth annual report of teacher supply and demand in Florida. Over the last two years statements released by the Department on teacher supply and demand have emphasized three things: one, the state is not yet experiencing a general teacher shortage; two, current shortages do exist in specific teaching fields such as mathematics, science, and exceptional education and in geographic areas which are the fastest growing; and, three, Florida faces the likelihood of a more general teacher shortage in the 1990s when the children born to parents of the post-World War II baby boom reach high school.

As reflected in this fifth supply and demand report, the message has not changed; the general trends remain the same. However, details of the picture are becoming clearer. Specifically, for 1985-86, the school year covered by this report, these details included the following:

- \* The children born during the first year of the nation's current baby boom were in the first grade.

- \* Districts already were feeling the effects of increased state graduation requirements and the longer school day. Even as early as 1984-85 these two policies had resulted in the need for additional teachers, especially in basic secondary subject fields.

- \* Several colleges of education were in the process of restructuring their teacher education courses into five-year programs which, while being more demanding, will also hopefully be more attractive to those making career choices.

- \* Early recipients of teacher financial aid programs were graduating and entering the classroom.

- \* Other state-level mechanisms for attracting teachers, such as the Teacher Recruitment Center and alternative certification, were being implemented.

The effects of these trends on the demand for new teachers are already being felt in an increase in the number of secondary teachers needed in 1984-85 and of elementary teachers in 1985-86. It is still too early to determine how much effect measures to increase the number and quality of teacher-candidates will have.

This gap between our knowledge of supply and demand extends into the future. Because of its close relationship to

demographic trends, it is much easier to make projections of the number of new teachers needed in public schools in Florida in the 1990s than it is to project the number of available new teachers. The number of persons entering teaching is affected not only by demographic trends, but also by economic and other incentives to teaching in Florida, the general economy and competing job opportunities in other employment sectors, and the perceptions those choosing careers have of the balance between the positive and negative aspects of teaching.

The challenge Florida faces is to continue to find ways to attract and retain more teachers. This must include fully implementing measures already undertaken, testing them to determine if they do indeed influence career choices and produce more and better teachers, and designing further strategies. Within the schools themselves we need to find ways, not only to continue to increase the amount of learning taking place, but to create an environment with built-in rewards for both teacher and student. It is unlikely that capable students who find the learning process unchallenging will choose to become teachers as they begin to make their own career choices.

## CURRENT DEMAND FOR TEACHERS

Three data sources available annually within the Department of Education help to gauge the State's demand for new teachers: the Fall Staff Survey, containing the current number of teachers and the number of teacher terminations the prior year; the Fall Vacancy Survey by subject field; and the Course Code Survey, which includes information on the number of out-of-field teachers by individual course. This section is a summary of information from these three sources available during the 1985-86 school year.

### Demand: Teacher Vacancies, Fall 1985

Each fall Florida's 67 school districts complete a survey of teacher vacancies occurring at the beginning of the school year. On this survey they report how many vacancies occurred in each subject field, how many of their newly hired teachers taught in Florida the prior year, and how many were not certified in the appropriate field. Districts are also asked to specify the number of vacancies remaining unfilled by October 1. This is a summary of the responses to the 1985 survey, covering the period from July 1 to October 1, 1985.

### Number of Fall 1985 Vacancies Compared to Prior Years

During fall 1985 school districts in Florida had a total of 7,993 vacancies, an increase of less than one percent over the prior year. (See Table 1.) By comparison, enrollments during this same period increased by 2.5 percent. This modest increase in the number of vacancies was preceded by a 26.8 percent increase during fall 1984, compared to an increase in student enrollment of only 1.9 percent.

Table 1  
Percentage Change in Number of Teacher Vacancies  
Fall 1982 - Fall 1985\*

Subject Field	Vacancies Fall 1982	Vacancies Fall 1983	Percentage Change	Vacancies Fall 1984	Percentage Change	Vacancies Fall 1985	Percentage Change
Tot. Basic	4,223	4,651	10.1	6,007	29.2	6,105	1.6
Tot. Excep.	1,241	1,185	-4.5	1,379	16.4	1,495	8.4
Tot. Voc.	462	471	1.9	535	13.6	393	-26.5
Total	5,926	6,307	6.4	7,921	25.6	7,993	0.9

\*Taken from Appendix Table A5.

The main reason given by district personnel directors for the unexpectedly large number of vacancies during the prior fall (1984) was the need to hire a number of additional teachers to staff a longer school day. Legislation to strengthen graduation requirements passed in 1984 included special funding enabling districts to adopt an extended school day. Many districts chose to hire additional teachers for this purpose rather than to pay existing teachers a bonus to teach more periods.

It is not surprising that this significant expansion during 1984 was followed by a year in which increases in the numbers of vacancies did not even keep pace with enrollment increases. Even so, the size of the increase was larger than expected. The survey showed that the Department of Education's fourth annual teacher supply and demand report underprojected the fall 1985 vacancies by about 400 positions, mainly due to the approximately 12,000 more students who enrolled in Florida schools in 1985-86 than had been anticipated by the districts earlier.

#### Trends of Vacancies by Subject Area

As shown by Table 1, during fall 1985 there was an increase in the number of vacancies in exceptional programs but a significant decrease in vacancies in vocational programs. Exceptional program increases were caused by increases in elementary enrollments and continued program expansion in several exceptional programs. Vacancies in specific exceptional programs may also be related to ongoing shortages in these fields. For some years districts have not been able to hire a sufficient number of appropriately certified personnel in several exceptional fields, creating a backlog of positions to be filled.

The overall decrease in vacancies in vocational programs in fall 1985 reflects recent trends whereby students seem to be taking more basic courses and fewer vocational courses in order to meet new graduation requirements. During 1984-85 the number of vocational vacancies increased right along with increases in basic academic fields, and for the same reason: the longer school day. During that same year the number of home economics vacancies more than doubled because of newly required life-management courses. Some of the decreases in vocational vacancies in fall 1985 may indicate an overexpansion in the number of teachers hired to teach these life-management courses.

Vacancies for the various subject fields during fall 1985 show a close relationship to enrollment trends at different grade levels. During the school year 1985-86 enrollments in

nearly every grade were larger than anticipated. Most of the growth, however, came in kindergarten and first grade, as Florida's schools begin to feel the effects of the sharp rise in the number of births which began in 1976. As shown in Table 2, these enrollment increases in the early grades resulted in a 17-percent increase in the number of elementary vacancies in fall 1984, followed by a 22-percent increase in fall 1985. By contrast, although secondary subject fields like mathematics and English experienced sizeable increases in the number of vacancies in fall 1983 and 1984, both years these increases came without a simultaneous increase in enrollments. It is not surprising, therefore, that most secondary subject fields had even fewer vacancies in fall 1985 than they did the prior year.

The continuing shift in the number of vacancies among program areas can be seen in Table 3. As shown, vacancies in basic programs are representing an increasing proportion of all vacancies. Currently more than three out of four of all openings are for teachers of basic subjects. Vacancies in vocational programs decreased when compared to other program areas, while vacancies occurring in exceptional programs increased in proportion to other areas after two years of decrease.

#### Subject Fields Difficult to Fill in Fall 1985

Without the large increase in vacancies experienced the prior year, Florida school districts were more successful in finding appropriately certified teachers to fill existing vacancies. As a result the overall percentage of newly hired teachers teaching out of field decreased from 9.2 percent in fall 1984 to 7.6 percent in fall 1985. As shown in Table 4, the most severe shortages continue to be in exceptional education programs, where 18.1 percent of the teachers hired were inappropriately certified, up from 17.6 percent the prior year. In basic programs 5.2 percent of the new teachers were hired for courses for which they were not certified, while in vocational programs the proportion was 6.4 percent.

Table 5 shows the subject fields in which 9 percent or more of the new teachers hired did not meet the certification requirements. They include science, foreign languages, and six exceptional education fields. Among teachers hired to fill vacancies in basic subjects, 11.2 percent of the new science teachers and 9.7 percent of the new foreign languages were not appropriately certified. Although these percentages are high in comparison to other fields, the year

**Table 2**  
**Percentage Change in Number of Teacher Vacancies**  
**Fall 1982 - Fall 1985\***

Subject Field	Vacancies Fall 1982	Vacancies Fall 1983	Percentage Change	Vacancies Fall 1984	Percentage Change	Vacancies Fall 1985	Percentage Change
Elem. Educ.	1,695	1,742	2.8	2,032	16.6	2,484	22.2
English/Lang. Arts	726	852	43.9	960	12.7	877	-8.6
Math	474	521	9.9	668	28.2	562	-15.9
Science	345	506	46.6	797	57.5	589	-26.1
For. Lang.	85	107	25.9	249	132.7	233	-6.4
Ment. Handi.	233	202	-13.3	239	18.3	221	-7.5
Speech Ther.	185	163	-11.9	199	22.1	210	5.5
SLD	288	284	-1.4	298	4.8	352	18.3
Emot. Handi.	264	261	-1.1	309	18.4	315	1.9
Var. Excep.	99	91	-8.1	121	33.0	97	-54.5
Bus.	102	98	-3.9	135	37.8	66	-51.1
Home Econ.	62	65	4.8	135	107.7	76	-43.7

\*Taken from Appendix Table A5.

**Table 3**  
**Number of Teacher Vacancies**  
**Fall 1982 - Fall 1985\***

Subject Field	Vacancies				Vacancies in Each Field as a Percentage of all Vacancies			
	Fall 1982	Fall 1983	Fall 1984	Fall 1985	Fall 1982	Fall 1983	Fall 1984	Fall 1985
Tot. Basic	4,223	4,651	6,007	6,105	71.3	73.7	75.8	76.4
Tot. Excep.	1,241	1,185	1,379	1,495	20.9	18.8	17.4	18.7
Tot. Voc.	462	471	535	393	7.8	7.4	6.8	4.9
Total	5,926	6,307	7,921	7,993	100.0	100.0	100.0	100.0

\*Taken from Appendix Table A6.

**Table 4**  
**Subject Fields With More Than Nine Percent of New Hires**  
**Not Certified in the Appropriate Field**  
**Fall 1984 - Fall 1985\***

Subject Fields	1984		1985	
	Total Number of New Hires	Percentage Not Certified In The Appropriate Field	Total Number of New Hires	Percentage Not Certified In The Appropriate Field
Tot. Basic	5,715	7.9	5,815	5.2
Tot. Excep.	1,223	17.6	1,350	18.1
Tot. Voc.	490	4.0	359	6.4
Total	7,428	9.2	7,524	7.6

\*Taken from Appendix Table A3.



Table 5  
Subject Fields With More Than Nine Percent of New Hires  
Not Certified in the Appropriate Field  
Fall 1984 - Fall 1985\*

Subject Fields	1984 Total Number of New Hires	Percentage Not Certified In The Appropriate Field	1985 Total Number of New Hires	Percentage Not Certified In The Appropriate Field
Science	753	17.7	569	11.2
For. Lang.	233	10.6	226	9.7
Ment. Handi.	215	15.3	191	16.2
Phy. Imp.	14	14.3	24	33.3
SLD	273	15.3	327	13.1
Emot. Handi.	278	26.2	292	31.8
Gifted	85	49.4	80	38.8
Var. Excep.	109	8.7	172	16.9
Dist.	22	18.2	14	21.4

\*Taken from Appendix Table A3.

before they were even higher--17.1 and 10.6 percent, respectively.

The opposite was true for several exceptional education fields. An even larger percentage of out-of-field teachers was hired than the prior year to teach in programs for the mentally handicapped, physically impaired, and specific learning disabled (SLD), and in classes designated as varying exceptionalities. While data for programs for the emotionally handicapped continue to target this as the field with the most severe shortages, the percentage of out-of-field teachers hired decreased from 49.4 percent in fall 1984 to 38.8 percent in fall 1985.

Table 6 is taken from Appendix Table A4, which adds the percentage of teachers hired out of field to the percentage of positions which were unfilled. Included in Table 6 are those fields which had (1) forty or more positions unfilled or filled out of field and (2) fifteen percent or more of the positions in that field unfilled or filled out of field. Those falling into both these categories are the fields mentally handicapped, speech therapy, SLD, emotional handicapped, and varying exceptionalities, all programs for exceptional education students.

What is significant about Table 6 are the subject fields which are not included. Using the same criteria, mathematics, science, and foreign languages were all on this list during fall 1984, and these three fields, along with English, were also on the 1983 list. During fall 1985, while all of these secondary subject fields except foreign languages had more than 40 positions unfilled or filled out of field, the percentages for all of them were below the arbitrary 15 percent cutoff. For comparison, percentages of



Table 6  
Subject Fields Which Were  
The Most Difficult to Fill  
Fall 1985\*

Subject Fields	Estimated Number of Vacancies	Vacancies Unfilled or Filled Out of Field	Percentage of Vacancies		
			Filled Out of Field	Unfilled	Unfilled or Filled Out of Field
Ment. Handi.	221	61	14.0	13.6	27.6
SLD	352	68	12.2	7.1	19.3
Emot. Handi.	315	116	29.5	7.3	36.8
Var. Excep.	187	44	15.5	8.0	23.5

\*Taken from Appendix Table A4. Defined as fields having (1) 40 or more positions unfilled or filled out of field and (2) fifteen percent or more positions unfilled or filled out of field.

unfilled or filled out-of-field positions for these fields for all 1985 were as follows: English, 9.3; mathematics, 11.5; science, 14.3; and foreign languages, 12.4.

While this trend--district personnel directors being able to fill a larger percentage of their vacancies with certified teachers in these important areas--is encouraging, it should be remembered that significantly fewer teachers were needed in each of these fields than the prior year. There is, therefore, no indication that more teachers are available in these critical fields. Indeed, while in each case the certified teachers hired represented a larger proportion of the total number of vacancies, the actual number of certified teachers hired was smaller than the prior year. By contrast, the number of elementary vacancies increased by 22 percent. Despite this increase in vacancies at the elementary level, representing 452 positions, the percentage of vacancies filled by certified teachers hired to fill this larger number of vacancies increased from 91.5 to 92.1 percent, indicating a continuing supply of elementary teachers in contrast to an insufficient supply of teachers of secondary subjects.

#### Percentage of Teachers New to Florida Public Schools

School districts are asked to indicate on the vacancy survey how many of their newly-hired, certified teachers taught the prior year in another Florida school district or, in other words, were simply moving from one school district to another. When looking at teacher demand at the state level, these individuals are technically not "new hires" since they taught in the public education system somewhere in Florida the year before.

During fall 1985 about 23 percent of the teachers covered by this survey were reported as having taught the prior year in another Florida school district. This proportion is somewhat greater than the proportion for fall 1984 (20 percent), when a sizeable increase in the number of vacancies meant more of the vacancies had to be filled by new teachers. During fall 1983, 26 percent of the vacancies represented teachers moving from one school district to another.

Several large school districts continue to have difficulty determining from their computerized records how many of the teachers they hired taught elsewhere in Florida the prior year. Therefore, the figures reported in this section need to be regarded as estimates rather than precise numbers.

### Vacancies by School Districts

Vacancy data for each of the 67 school districts for fall 1984 and fall 1985 may be found in Appendix Table A7. As has been stated, statewide the number of vacancies increased by 0.9 percent. The final column of Table A7 shows the percentage change in the number of vacancies from 1984 to 1985 for each district. These percentages of change varied widely, ranging among the larger districts from more than 100 percent increase in both Brevard and Dade to more than a 20 percent decrease in Pinellas, Pasco, and Leon. (Dade's increases in 1985 bring its percentage of vacancies slightly closer to the state average. During fall 1984 the number of vacancies in Dade as a percentage of teachers was so far below the other counties as to leave questions about the report. Even with the increase, Dade ranks fourth from the bottom in the percentage of vacancies.) Many of the smaller districts had sharp decreases in the number of vacancies.

Districts also varied widely in the degree of difficulty they had in filling positions. The percentage of positions unfilled or filled out of field for fall 1985 ranged from about 60 percent in Citrus and Washington to none in eight other districts. Eight districts other than Citrus and Washington had 25 percent or more of their vacancies unfilled or filled out of field. Thus, according to results of the fall 1985 vacancy survey, ten school districts in Florida faced severe enough teacher shortages that by October 1 at least one fourth of their vacant positions were still unfilled or had been filled by teachers not certified in the appropriate field, two more districts than in fall 1984.

Fortunately for the individual districts, the districts having the most difficulty filling positions with

appropriately certified teachers tend to vary from year to year. Only the districts of Brevard, Nassau, and St. Lucie have experienced this 25-percent-or-more level for both 1984 and 1985, with Baker close behind, having 24.4 and 30.0 percent, respectively, for these two years.

#### Demand: Teacher Terminations

Each year from 6.0 to 8.0 percent of Florida's classroom teachers retire or resign for other reasons. During 1984-85, the latest data year, there were 1,674 retirements (2.0 percent of the 1984-85 teaching force) and 4,365 resignations (5.1 percent). Together these two types of terminations totalled 7.0 percent of the teachers, up from 6.0 percent in 1982-83 and 6.6 in 1983-84. (The termination rate used in this report for making projections of future teacher needs was 7.33. The number of terminations used in calculating this included dismissals. See Table 7.)

Table 7  
Classroom Teachers Terminating

	Number	%*	Number	%*	Number	%*
Retirements	1,334	1.63	1,294	1.56	1,674	1.94
Resignations	3,589	4.38	4,156	5.01	4,365	5.06
Dismissals	<u>277</u>	<u>0.34</u>	<u>186</u>	<u>0.22</u>	<u>289</u>	<u>0.33</u>
Total	5,200	6.34	5,636	6.79	6,328	7.33
Total Classroom Teachers	81,982		82,928		86,244	

\*Number as a percentage of the total number of classroom teachers.

The percentage of teachers retiring each year has varied over the last ten years from 1.1 in 1976-77 and 1980-81 to a high of 2.0 percent during 1984-85, the most recent data year. At the same time the total number of classroom teachers has also been increasing. These two trends are together resulting in twice as many teachers retiring in 1984-85 (1,674) as eight years earlier (836). During the three years from 1981-82 to 1983-84 the percentage of teachers retiring averaged 1.5 percent.

It is unclear whether the 1984-85 jump to 2.0 percent in the percentage of retiring teachers is the beginning of another move upward in the percentage of teachers retiring annually or whether 1984-85 was an atypical year. A study under way combining retirement and certification records for 1983-84 indicates 5.5 percent of the teaching force during that year was ages 60 and above, while another 18.5 was ages 50 to 59.

The median age was 39. If teachers tend to wait until they are 60 or older to retire, then retirement rates over the next few years should not be much higher than those seen over the last few years. If, however, a significant number of teachers are retiring short of age 60, then higher retirement rates may be expected.

Seven out of ten of the teachers terminating each year resign "for other personal reasons." The number of resignations for other personal reasons during 1984-85 was 4,365, or 5.1 percent of all classroom teachers, about the same as the 5.0 percent the prior year. Combining this information with data from the vacancy report on the number of teachers hired who taught elsewhere in Florida the prior year, it can be estimated a third of these resignations have been for the purpose of relocating to another Florida school district. The rest of the resignations for personal reasons (from 40 to 50 percent of all terminations) represent teachers leaving the classroom short of retirement for such varied reasons as moving to another state, returning to school, staying at home with the family, or seeking employment outside of education.

Estimating the number of teachers who terminate their positions is an important element in projecting teacher demand. In the absence of any clear trend, the second half of this report uses the termination rate for the most recent year to project the number of terminations through the year 2000. No information is available on the number of teacher terminations by subject field. Therefore, in making the projections, the distribution by subject area was based on the subject field distribution of the vacancies for fall 1984. This procedure seems preferable to one which would assume the same termination rate for each subject area.

#### Demand: Teachers Teaching Out of Field

In fall 1983 the Department of Education began collecting information on the number of teachers in each course teaching out of field, that is, teaching courses for which they did not have the appropriate certification.<sup>1</sup> According to this survey, during fall 1985, 4.3 percent of Florida's teachers were teaching out of field. (See Table 8.) The percentage of teachers teaching in areas in which they are

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<sup>1</sup>All out-of-field data shown are based on full-time-equivalent teachers. Thus, if teachers were teaching in more than one subject area, they were counted as out of field for only the proportion of time they actually spent teaching out of field.

not certified is particularly high in exceptional education programs--8.0 percent, compared to 3.8 percent in basic programs and 3.3 percent in vocational programs. All four main secondary fields--English, mathematics, science, and social studies--have 5.0 percent or more teachers teaching out of field. In mathematics 7.4 percent of the teachers are teaching out of field; in science, 8.3 percent. By contrast, only 1.2 percent of the elementary classroom teachers were teaching out of field, while 20.0 percent of the teachers of emotionally handicapped and 17.8 percent of the teachers of the gifted were teaching out of field.

Table 8  
Number of Teachers Teaching Out of Field\*

Subject Fields	Fall 1985 Number of FTE Teachers		
	1 Total	2 Teaching Out of Field	3 Percentage 2/1
Tot. Basic	70,266	2,666	3.8
Tot. Excep.	11,059	889	8.0
Tot. Voc.	6,069	203	3.3
Total	87,395	3,759	4.3

\*Taken from Appendix Table A8.

Comparisons across fields are difficult because of data problems. Last year's teacher supply and demand report discussed the difference between percentages of out-of-field teachers reported by Dade County and the rest of the state. Specifically, according to data collected at the secondary level for both 1983 and 1984, as many as half of the state's out-of-field teachers were in Dade County, although Dade represents only 14 percent of the teaching force. At the time that report was being written Dade staff was not able to determine whether the differences in percentages between the district and the state were due to an inconsistency in definitions or an error in the collection of the data, or if they represented a genuine difference between the proportion of out-of-field teachers in Dade and the rest of the state.

Although the source of the difference was never resolved, this year's out-of-field data show Dade's percentages to be about half way between their figures for the two prior years and the rest of the state. It would seem, therefore, that both explanations for the differences during 1983 and 1984 may be correct--there were problems in the procedures for collecting the data, but Dade County also has higher percentages of teachers teaching out of field at the



secondary level than does the rest of the state.

Because of the differences between Dade's data in 1985 and the two prior years, the only way to compare percentages of out-of-field teachers across years is look at state data without Dade. As examples, Tables 9 and 10 present percentages for representative basic courses. Measurable improvement can be seen in the fields of English and foreign languages. Percentages of out-of-field teachers for the state without Dade decreased from 5.0 percent in fall 1984 to 4.1 percent in 1985 in English, and from 7.0 percent to 3.6 percent in foreign languages. At the same time, percentages of out-of-field mathematics teachers increased from 5.5 percent to 6.7 percent. Science also increased slightly from 6.8 percent to 7.0 percent.

Information used on exceptional education programs does not suffer from the same problems as those in basic programs because a different data base was used in which there were no special data collection problems in Dade. Comparisons of selected programs are shown on Table 11. A significantly smaller proportion of teachers of the gifted were teaching out of field in 1985 than in 1984 (from 24.3 percent to 17.8 percent), but the situation had worsened in programs for the specific learning disabled (SLD), emotionally handicapped, and courses designated varying exceptionalities. Of particular concern, the proportion of improperly certified teachers in classes for the emotionally handicapped increased from 15.6 percent to 20.0 percent.

Varying figures are given on the percentage of out-of-field teachers nationwide. Although comparisons are risky because of differences in data definitions, Florida's overall percentage of 4.3 seems to compare favorably with national estimates. However, within specific subject areas and specific districts the proportion of out-of-field teachers in the state is unacceptable by any standard. For instance, the state education system needs to lower significantly the percentage of teachers teaching out of field in such areas as emotionally handicapped and science, either by graduating a larger number of new teachers in the fields where they are most needed, or by encouraging existing teachers to upgrade their certification in the areas of need. An important target for extending certification areas should probably be those teachers who are already teaching one or more classes out of field.

Table 9  
Number of Teachers Teaching Out of Field\*  
Selected Fields

Subject Fields	Fall 1984 Number of FTE Teachers			Fall 1985 Number of FTE Teachers		
	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4
SLD	2,294	106	4.6	2,121	176	8.3
Emot. Handi.	1,345	210	15.6	1,197	239	20.0
Gifted	1,099	267	24.3	1,232	219	17.8
Var. Excep.	1,823	68	3.7	2,228	162	7.3
Ind. Arts	1,148	67	5.9	1,203	54	4.5

\*Taken from Appendix Table A8.

Table 10  
Number of FTE Teachers Teaching Out of Field  
Dade County Compared to the Rest of the State  
Fall 1984

Subject Fields	S T A T E			D A D E			STATE WITHOUT DADE		
	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4	4 Total	5 Teaching Out of Field	6 Percentage 5/4
Elem. Educ.	28,811	286	1.0	4,730	54	1.2	24,081	231	1.0
Eng./Lang. Arts	9,179	594	6.5	1,058	184	17.4	8,121	410	5.0
Math	5,805	405	7.0	704	124	17.6	5,100	282	5.5
Science	5,209	475	9.1	601	163	27.0	4,608	312	6.8
Soc. Stud.	4,736	377	8.0	574	132	22.9	4,162	245	5.9
For. Lang.	1,666	114	6.8	456	29	6.4	1,210	85	7.0
Health/PE	5,005	287	5.7	724	149	20.5	4,281	138	3.2

Table 11  
Number of FTE Teachers Teaching Out of Field  
Dade County Compared to the Rest of the State  
Fall 1985

Subject Fields	S T A T E			D A D E			STATE WITHOUT DADE		
	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4	4 Total	5 Teaching Out of Field	6 Percentage 5/4
Elem. Educ.	28,661	341	1.2	4,722	65	1.4	23,938	277	1.2
Eng./Lang. Arts	9,489	501	5.3	1,227	159	13.0	8,262	342	4.1
Math	6,334	472	7.4	702	93	13.2	5,633	379	6.7
Science	6,803	552	8.3	848	145	17.1	5,955	416	7.0
Soc. Stud.	5,070	337	6.6	625	98	15.7	4,445	239	5.4
For. Lang.	2,147	112	5.2	817	38	4.6	1,330	74	5.6
Health/PE	5,773	183	3.2	845	48	5.6	4,928	135	2.7



## CURRENT SUPPLY OF TEACHERS

Teacher supply is more difficult to measure than is teacher demand. The pool of possible Florida teachers includes recent graduates of teacher education programs, both in and outside of Florida; recent graduates of other programs who plan to enter teaching either by satisfying the course requirements after graduation or via the alternative certification route; certified or certifiable college graduates who are not currently teaching, including those actively seeking positions and those who are at home, have returned to school, or are employed in other fields; teachers in other states or in the private sector who are willing to relocate or transfer; and mature adults without teaching credentials--including returning women and retirees--who might respond to the challenge of returning to school to prepare for a career change.

Of these components of the potential Florida teacher pool, only the number of Florida teacher education graduates is known. Even this piece of information is of limited usefulness because it is difficult to determine how many of these graduates end up teaching in Florida or, conversely, what proportion of the state's newly employed teachers graduated from Florida teacher education programs.

While acknowledging the lack of information on many components of teacher supply, this section focuses on the information that is available--the number of teacher education graduates and limited information on candidates passing the Florida Teacher Certification Examination and the number of new teaching certificates issued.

### Supply: Graduates of Teacher Education Programs

During 1985-86 there were 26 institutions offering teacher education programs in Florida, including each of the 9 state universities and 17 private colleges and universities. Both the size and the scope of the subject offerings in these programs are diverse. For instance, during 1984-85 four state universities had more than 200 teacher education graduates, while two colleges had fewer than 25 teacher education graduates and six had from 26 to 50 graduates.

The structure of the teacher education programs also differs from institution to institution. Several colleges of education have recently made fundamental changes in their programs or are in the process of doing so. For instance, the University of Florida's new PROTEACH program is a five-year program leading to a master's degree. Students wishing

to be certified in secondary education must complete a bachelor's degree in their subject area in addition to a master's degree in education. This program seems to be attracting a higher quality of teacher-candidates than the earlier four-year program. However, as is true in other programs which have undergone recent changes, it is still too early to know how these programs will affect the total number of teacher education graduates.

Since 1981 an annual survey of Florida teacher education graduates and projected graduates has been taken for the Department of Education by the Florida Association of Colleges for Teacher Education. The results of this survey continue to be vital to efforts to assess the supply of new teachers. This report is a summary of information collected during 1985-86 compared to survey results for the past three years.

#### Graduates During 1984-85 Compared to Projections a Year Earlier

As shown on Table 12, 3,097 students graduated from Florida teacher education programs during 1984-85, about 3 percent fewer graduates than the prior year. At the time of the fall 1984 survey, administrators of teacher education programs had projected a total of 3,186 graduates for 1984-85, about the same as the prior year. This projection, which proved to be 3 percent higher than the actual number of graduates, was more accurate than the projection of 1983-84 graduates made in fall 1983, when the number was underprojected by 8 percent.

Table 12  
Number of Graduates of  
Teacher Education Programs  
Program Areas\*

Program Areas	1 1984-85 Projected	2 1984-85 Actual	3 1985-86 Projected	4 1986-87 Projected	5 1987-88 Projected
Tot. Basic	2,367	2,393	2,554	2,731	2,923
Tot. Excep.	670	552	611	623	683
Tot. Voc.	149	152	179	172	177
Total	3,186	3,097	3,344	3,526	3,783

\*Taken from Appendix Table A9.

The 1984-85 projections of graduates planning to teach basic and vocational courses were particularly close--off by only about 1 percent. However, 18 percent fewer students graduated from exceptional education programs than were

expected. Two programs accounted for much of the overprojection in exceptional education: speech therapy and education for the mentally handicapped. (See Appendix Table A9.)

Table 13 takes the actual numbers of students graduating from 1982-83 to 1984-85 and compares these numbers with prior year projections for selected fields. Included are elementary education and five subject areas designated as critical teaching fields by the State Board of Education for 1986-87: English, mathematics, science, foreign languages, and education for the emotionally handicapped.<sup>2</sup>

The number of elementary education graduates for each of these three years has been about 10 percent higher than projected. Projections for 1984-85 in mathematics, science, and English proved to be more accurate than in prior years, when the numbers tended to be significantly overprojected one year and underprojected the next. Projections of graduates in programs for the emotionally handicapped, while underprojected for 1984-85 by 11 percent, have been more reliable over the past three years than those for other critical teaching fields. Conversely, only about half as many students graduated from teacher education programs in foreign languages as expected. The number of foreign language graduates unexpectedly decreased from 27 to 20 in 1984-85, even though an increase to 37 had been projected.

#### Projections through 1987-88 Compared to Recent Trends

Tables 14 and 15 show the trends in the number of graduates for selected fields, ranked according to the percentage change from 1984-85 to 1987-88. It is encouraging to note that the critical teaching fields of science, mathematics, emotionally handicapped, foreign languages, and English are among those with projected increases of thirty percent or more by 1987-88. If the projections prove to be reliable, it would seem measures taken to increase the number of teacher candidates entering these fields are indeed having an impact.

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<sup>2</sup>English was a designated a critical teaching field for 1985-86 and 1986-87. Because fewer teacher vacancies in English occurred in fall 1985 than the two prior years, English is not included on the list of critical teacher fields approved by the State Board of Education for 1987-88.

Table 13  
Number of Graduates of  
Teacher Education Programs  
Compared to Projected  
Selected Fields\*

Subject Fields	1982-83			1983-84			1984-85		
	Proj.	Actual	Percent. (2/1)	Proj.	Actual	Percent. (2/1)	Proj.	Actual	Percent. (2/1)
Elem. Educ.	1,183	1,296	109.6	1,172	1,314	112.1	1,263	1,373	108.7
English	154	134	86.7	132	120	90.9	144	148	102.8
Math	65	89	136.9	128	83	64.8	114	107	94.3
Science	61	83	135.2	108	66	60.9	70	68	96.4
For. Lang.	19	26	136.8	29	27	93.1	37	20	54.1
Emot. Handi.	119	114	95.5	107	98	91.6	103	92	89.0

\*Taken from Appendix Table A10.

Table 14  
Number of Graduates of  
Teacher Education Programs  
Projected Increases by 1987-88  
Of Thirty Percent or More  
Selected Fields\*

Subject Fields	1981-82	1982-83	1983-84	1984-85	Percent. Change 1981-82 to	1987-88	Percent. Change 1984-85 to
					1984-85		1987-88
Science	35	83	66	68	92.9	141	108.9
Math	52	89	83	107	105.8	187	74.3
Emot. Handi.	120	114	98	92	-23.3	148	61.4
Foreign Lang.	20	26	27	20	0.0	29	45.0
English	133	134	120	148	10.9	207	40.3
Trades/Ind.	47	49	74	53	12.8	70	32.1

\*Taken from Appendix Table A11.

Table 15  
Number of Graduates of  
Teacher Education Programs  
Projected Increases by 1987-88  
Of Less Than Thirty Percent  
(Including Decreases)  
Selected Fields\*

Subject Fields	1981-82	1982-83	1983-84	1984-85	Percent. Change 1981-82 to	1987-88	Percent. Change 1984-85 to
					1984-85		1987-88
Ment. Handi.	106	142	172	117	10.1	146	25.3
Soc. Stud.	117	107	140	132	12.4	163	24.0
Musci	107	87	99	99	-7.5	119	20.2
Art	66	69	68	55	-16.7	66	20.0
SLD	224	191	222	193	-13.8	227	17.6
Elem. Educ.	1,232	1,296	1,314	1,373	11.4	1,608	17.1
Health/PE	420	373	326	307	-26.9	308	0.3
Speech Ther.	NA	123	107	84	-31.7	78	-7.1

\*Taken from Appendix Table A11.  
NA = Not available.

These projections, however, need to be evaluated in the light of trends over the past four years. For instance, the projected increases in elementary education, while seemingly reasonable from the standpoint of trends over the past few years, may actually be too small, simply because this field has consistently been underprojected in the past. On the other hand, projected increases in science and mathematics seem to be in keeping with recent trends. The above-average growth in these two fields is important since they have consistently been targeted in scholarship and loan programs and in other efforts to increase the supply of teachers.

Projections for most of the other fields are higher than recent trends would indicate. For instance, the number of graduates in programs for the emotionally handicapped is projected to increase by 61 percent over the next three years; however, the number over the past three years has actually decreased by 23 percent. Other programs where significant increases are projected, such as social studies and education for the mentally handicapped, have shown only small increases over the last few years. Thus projected increases shown in Tables 14 and 15 may be unduly optimistic for these fields, as well as the increases shown for such fields as art, specific learning disabilities, and health/physical education, which have faced significant decreases over the past few years.

Not only should optimism about projected increases be tempered by comparing them with recent trends, but the increases should also be evaluated in light of the projected demand for new teachers. The outlook remains bleak if it looks as if projected increases in vital fields are still going to result in a supply that is far short of the demand. More detailed comparisons of teacher supply and demand data are presented in the third section of this report.

#### Supply: Candidates Passing The Teacher Certification Examination

To be certified to teach in Florida, each new applicant must pass a written examination containing sections in reading, writing, mathematics, and professional education. During the period 1981 to 1983, from 79 to 86 percent of all test candidates passed all four sections of the examination. In April 1983 the State Board of Education made the test more difficult by raising the cutoff score. Since then from 77 to 83 percent of the candidates have passed the examination.

As seen in Table 16, the number of candidates taking and passing all four parts of the teacher certification examination increased from 7,426 in 1983-84, to 8,081 in



Table 16  
Number of Candidates  
Passing the Florida Teacher Certification Examination

	Florida	Out of State	Total
1983-84			
Number	3,348	4,078	7,426
Percentage	45.1	54.9	100.0
1984-85			
Number	3,746	4,335	8,081
Percentage	46.4	53.6	100.0
1985-86			
Number	3,843	5,119	8,962
Percentage	42.9	57.1	100.0

1984-85, and to 8,962 in 1985-86. These figures represent an increase of 8.8 percent in 1984-85 and 10.9 percent in 1985-86.

One of the reasons more applicants are now taking the certification examination is that the rules governing who may take it have changed. Earlier, teaching candidates could not take the examination unless they had completed the certification process. Applicants may now take the examination if they have a degree and can qualify for an initial temporary certificate, or if they are a student in an approved teacher education program expecting to graduate within six months. With this change in the rules, colleges of education are encouraging students to take the examination prior to graduation. Officials in teacher education programs also report that some liberal arts majors are now taking the examination to increase their employment options even though they have not decided if they will seek a teaching position.

Knowing the total number of candidates passing the teacher certification examination is of limited value in evaluating the supply of teachers without also knowing the subject areas these candidates represent. Unfortunately, this information is not available.

As indicated in Table 16, certification examination results do, however, provide a breakdown of candidates by in state and out of state. Over the last three years on the average 55 percent of the candidates passing the examination were from out of state. Later in this section the percentage of examination candidates from out of state will be compared with information available from other sources on out-of-state teachers.

### Supply: Newly Certified Teachers

Extensive information is collected on individuals certified to teach in Florida. However, no procedure has been developed for keeping track of the current employment status of teachers once they are certified. Thus we do not know how many of these certified teachers are currently teaching in Florida, how many have left Florida or the field of education, how many are available for teaching, or even how many are retired or deceased. Since no way has been found to keep addresses current, attempts to survey certificate holders have been unsuccessful because of low response rates.

### Number of New Certificates

While the Active Certificate File cannot be used to estimate the size of the potential teacher pool, data can be retrieved on recent certificates issued to persons who have never before been certified to teach in Florida. The last two teacher supply and demand reports have included information from this file on the total number of certificates issued, with 5,821 reported for 1983-84 and 5,608 reported for 1984-85. In reality these two total numbers were estimates, not actual numbers. Certification records are kept track of, not by the date of the application or by the date the certificate was issued, but by certificate number. No way has yet been found to tie these certificate numbers to cutoff dates, such as July 1st of each year.

An attempt to determine appropriate beginning and ending numbers for 1985-86 resulted in an annual reported total of 8,228, much larger than the 5,821 and 5,608 totals estimated for the last two years. (See Appendix Table A12.) Because of the imprecise way in which the total for the year is arrived at, it is unclear whether this increase over the last two years is real or whether it is wholly or partially a function of the cutoff procedure.

Another reason it is difficult to tie new certificates issued to a particular year is the backlog of applications. Although an ongoing backlog has long been a problem, the size of the backlog increased even more over the last two years because of the implementation of the Master Teacher Program and new fingerprinting requirements. In addition, uncertainties about the certification laws themselves resulted in increased numbers of applicants seeking to qualify under old certification criteria. At one time during the 1985-86 year the backlog of certificate



applications had grown to 22,000. (It should be noted not all of these represented new certification requests. Also included in the 22,000 applications were requests for recertification and for extension of certification to other teaching fields.) The certification office is now processing more applications each month than ever before, but a backlog remains, making it all the more difficult to determine which new certificates belong to one year and which belong to the next.

Even if it were possible to determine the annual flow of new certificates issued, there would still not be a one-to-one relationship between certificates issued and the number of teachers hired. The Office of Teacher Certification encourages new applicants to secure a teaching position before completing the certification process. At the same time, districts sometimes require an applicant to have a certificate in hand before even being considered for a position. Teacher candidates, therefore, often apply for a certificate before they seek a teaching position. Not all of these new certificate holders end up teaching in Florida.

#### Distribution of Certificates by Subject Field

Even though the total number of new certificates issued in any given year is in doubt, the distribution of certificates by subject field provides valuable information about teacher supply. Table 17 compares the percentage of certificates issued in selected teaching fields with the percentage of new teachers needed in these fields in fall 1985. (The

Table 17  
Newly Certified Teachers  
Selected Programs\*

Subject Fields	Number Certified 1985-86	Number as a Percentage of All Fields	Number New Teachers Needed by School Districts Fall 1985*	Number as a Percentage of All Fields
Tot. Basic	6,648	80.8	4,869	75.9
Tot. Excep.	1,237	15.0	1,217	19.0
Tot. Voc.	343	4.2	331	5.2
Total	8,228	100.0	6,418	100.0
Elem. Educ.	3,365	40.9	1,952	30.4
Eng./Lang. Arts	710	8.6	718	11.2
Math	375	4.6	456	7.1
Science	711	8.6	486	7.6
For. Lang.	320	3.9	203	3.2
Emot. Handi.	165	2.0	259	4.0
Ind. Arts	61	0.7	80	1.3

\*Taken from Appendix Table A12.

number of new teachers needed does not include vacancies filled in fall 1985 by persons who taught the year before in another Florida school district.) The table shows that 40.9 percent of the new certificates were in elementary education while only 30.4 percent of the new teachers needed were in this field. The opposite trend can be seen in English, mathematics, emotionally handicapped, and industrial arts, where percentages of new teachers needed in those fields are significantly larger than the percentages of new certificates issued for those fields.

As explained above, the number of new certificates issued, as reported, probably represents more than one year of data. The total of new certificates shown in Table 17 is about 22 percent larger than the total shown for the number of new teachers needed. Thus, even when percentages shown in Column 2 of Table 17 (number of certificates in a given field as a percentage of all fields) are smaller than the percentages in Column 4 (number of new teachers in that field as a percentage of all fields), the numbers listed in some fields make it appear the number of certificates issued was larger than the number of new teachers needed. This is not true for the fields of English, mathematics, emotionally handicapped, and industrial arts, where even with these inflated figures, the number reported for certificates issued is smaller than the corresponding number of new teachers needed.

### Teachers from Out of State

One additional item of information from the Active Certificate File is important for understanding teacher supply in Florida: the college or university where the teacher candidates completed their work. This information can be used to classify each certificate as "in Florida" or "out of Florida." Unfortunately, this item has not always been coded. In 1983-84 two thirds of the individual records included this item, in 1984-85 about one third, and in 1985-86 slightly more than half. Regardless of the completeness of the data, however, the reported proportion of certificates awarded to candidates from out of state has not greatly changed. Table 18 gives the percentages of candidates from Florida colleges and universities for each of the last three years for the same subject fields shown in Table 17. As can be seen, although the percentage varies from field to field, overall in-state certificate recipients represent only from 30 to 36 percent of the recipients.

This statistic from the Active Certificate File has doubtlessly been the source of the oft-reported statement that from 60 to 65 percent of Florida's teachers come from

Table 18  
Percentage of New Certificates Issued  
To Graduates of Florida Colleges and Universities  
Selected Programs\*

Subject Fields	1983-84	1984-85	1985-86
Tot. Basic	35.2	29.2	34.4
Tot. Excep.	46.8	37.4	42.1
Tot. Voc.	29.9	25.8	26.0
Total	36.4	30.1	35.1
Elem. Educ.	38.8	34.6	39.9
Eng./Lang. Arts	27.9	22.8	24.1
Math	31.1	28.3	32.4
Science	35.2	23.4	33.4
For. Lang.	18.0	17.3	16.4
Emot. Handi.	76.5	67.4	63.5
Ind. Arts	9.6	0.0	2.9

\*Taken from Appendix Table A13.

out of state. Earlier teacher supply and demand reports have given further credence to this statement. It is perhaps time to revisit this issue, comparing certification data to information on out-of-state teachers available from other sources. One source has already been mentioned: the number of teachers passing the teacher certification examination. As stated, about 55 percent of the candidates pass the examination are from out of state.

A third source of information on out-of-state teachers is the School Summary Data Survey taken by the Department of Education each fall. One section of the survey asks schools to indicate the number of first-year teachers they had and how many of these teachers were Florida trained. Appendix Table A14 summarizes this information for each of the school districts for fall 1985. An abbreviated form of this information is presented in Table 19, showing state totals and data for the state's eight largest school districts. According to the survey, 55 percent of the state's first-year teachers during fall 1985 were trained in Florida, with the percentage for the eight largest districts ranging from 36 percent in Palm Beach and 38 percent in Brevard to 65 percent in Pinellas and 66 percent in Hillsborough.

Thus, according to these three sources of information, during 1985-86 approximately 65 percent of the persons who received new certifications, 55 percent of the candidates who passed the teacher certification examination, and 45 percent of the first-year teachers in Florida came from out of state. These differences in percentages are due mainly to the differences in the three groups. Both the population of persons receiving new certificates and the population of

Table 19  
Number of First-Year Teachers  
By School District  
Fall 1985  
Florida's Largest Districts\*

School District	Teaching First Year Fall School	Teaching First Year Fla. Trained	Percentage
<u>State Totals</u>	4,819	2,665	55.3
Brevard	196	75	38.3
Broward	282	135	47.9
Dade	702	421	60.0
Duval	278	165	59.4
Hillsborough	409	271	66.3
Orange	257	158	61.5
Palm Beach	445	159	35.7
Pinellas	228	148	64.9

\*Taken from Appendix Table A14.

examination takers include individuals who do not end up teaching in Florida. Of the two, the certification applicants who do not get a teaching position are more likely to be from out of the state, since this is one component of the beginning teacher process that can be completed by mail. The candidates taking the certification examination who do not get a teaching position are more likely to come from within the state since candidates must be physically present to take the examination.

Of the three statistics, only the one based on first-year teachers includes only persons who are teaching in Florida. Missing from this group of newly hired teachers are those who have one or more years of experience. It may be that a larger proportion of newly hired, experienced teachers are from out of state than is true for beginning teachers. We really do not know because no comparable information on experienced new hires is available. Nevertheless, from the information that is available, it would seem that we need to think in terms of 45 to 50 percent of Florida's new teachers coming from out of state rather than the 60 to 65 percent figure that is usually reported.

What difference does this shift in assumption make in the evaluation of the adequacy of Florida's teacher supply? On one hand, knowing that fewer of our teachers were trained outside the state means that components of the potential teacher pool other than new teacher education graduates--the sources of new teachers discussed in the beginning of this section--are accounting for a larger proportion of the newly hired teachers each fall than had been assumed.<sup>3</sup>

That aspect of this new look at the number of teachers from in state--that historically Florida may have been supplying a larger proportion of its new teachers than had been realized--is promising. On the other hand, looking at the future, the new assumption means the state may have to depend more on its own resources to fill future vacancies than had been presumed. Even if as large a proportion of teachers from out of state can be procured as in the past--a risky assumption in view of growing teacher needs in other states--the proportion of new teachers which must be found from within the state is larger than had been projected earlier.

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<sup>3</sup> Some of these new teachers from within the state no doubt are arts and sciences graduates not included in teacher education program statistics. Each year an unknown number of arts and sciences graduates either take education courses concurrently with their majors in French, history, or English literature, or they return to education colleges after receiving their degrees, taking only the necessary education courses, but bypassing teacher education programs as such.

## PROJECTED SUPPLY AND DEMAND

Understanding current trends is important to planning, but even more important is knowing what these trends might look like in the future. This section makes projections of the numbers of teachers needed by subject field through the year 2000, compares the demand for new teachers with the projected supply for 1987-88, and comments on general overall differences between supply and demand through the end of the century from the standpoint of demographic trends.

### Projections: Demand

During 1985-86 Florida employed 88,973 teachers in its elementary and secondary classrooms. (See Table 20.) Approximately 35 percent of those teachers were elementary education teachers, 46 percent taught other basic subjects (mainly in middle and secondary schools, but also as elementary subject-area teachers), 12 percent taught exceptional education, and 7 percent taught vocational courses.

Table 20  
Size of the Florida Teacher Workforce\*

	1985	P R O J E C T E D		
		1990	1995	2000
Elem. Educ.	31,464	39,850	44,200	44,150
Other Basic Subjects**	40,561	42,250	50,250	58,300
Exceptional Educ.	10,688	12,200	14,000	15,200
Vocational	6,260	6,200	7,500	9,050
Total	88,973	100,500	115,950	126,700

\*Summarized from projections presented in Appendix Tables A16-A17.

\*\*Includes mainly teachers in middle and secondary schools, but also elementary subject-area teachers.

One important component in the demand for new teachers relates to fluctuations in school enrollments. In fall 1985 the number of first graders in Florida increased by 10 percent over the year before. Most of this increase was due to the sharp rise in the number of births in the state six years earlier. These first graders, representing the leading edge of the echo effect of the post-World War II baby boom, will reach seventh grade in 1991 and twelfth grade in 1996.

Because of both this baby boomlet and the continued significant impact of migration to Florida, public school



enrollments are projected to increase steadily over the coming years. In the short term this growth will be in the elementary grades, with large increases not reaching the secondary level until the early 1990s. Compared to 1985-86, enrollments in grades K-6 will be 27 percent higher in 1990 and 40 percent higher in 1995. Again compared to 1985-86, enrollments in grades 7-12 will be about 1 percent lower in 1990, 20 percent higher in 1995, and 45 percent higher in 2000. Overall, public school enrollments are projected to increase by 42 percent from 1985 to the year 2000.

As enrollment increases move through the grades, the total number of teachers employed is also expected to increase. Based on the numbers shown in Table 20, the size of the teacher workforce compared to 1985 is projected to be 13 percent higher in 1990, 30 percent higher in 1995, and 42 percent higher in the year 2000.

The numbers shown in Table 20 represent the projected size of the total teacher workforce over the next fifteen years. How do these totals translate into numbers of additional teachers needed? The number of additional teachers needed each year is dependent on projected enrollments and on the number of teachers leaving the workforce, either retiring or resigning for some other reason. A summary of long-range projections of teacher needs for Florida may be found in Table 21, based on detailed projections found in Appendix Tables A15-17. As shown, although the total number of additional teachers is projected to increase from year to year, the biggest increases may be expected between 1990 and 1995. The number of new teachers needed in 1995-96 is expected to be 26 percent higher than the estimated number needed in 1986-87.

Table 21  
Projected Number of Teachers Needed  
Through the Year 2001  
Selected Fields\*

Subject Fields	Additional Teachers Needed					
	1986-87	1987-88	1988-89	1990-91	1995-96	2000-01
Tot. Basic	7,185	7,315	7,627	7,538	8,753	8,018
Tot. Excep.	1,547	1,580	1,640	1,650	1,912	1,871
Tot. Voc.	335	351	345	336	763	659
Total	9,068	9,247	9,611	9,524	11,427	10,547
Elem. Educ.	3,743	3,763	4,026	3,960	3,014	2,776
English	793	820	827	826	1,380	1,272
Math	491	510	511	509	913	835
Science	500	520	519	518	961	881
Soc. Stud.	362	377	375	373	721	654
For. Lang.	223	230	235	235	335	317

\*Taken from Appendix Table A15.



The projections shown in these tables are based on four data sources: (1) for ratios between the numbers of teachers and student enrollment, the Department of Education's Course Data File, which provides information on the current number of students and teachers in each course; (2) for an overall termination rate, teacher terminations for 1984-85; (3) for the distribution of the total number of teacher terminations by subject field, the fall 1985 teacher vacancy report (Part V of the Teacher Staff Survey); and (4) long-range projections of full-time-equivalent enrollments for grades K-6 and 7-12, as based on age-group population projections.

The base of the calculations for each year's projections was the number of teachers the prior year. Using this number, estimates were made of the number of teacher terminations by subject field for that year and the differences in the number of teachers needed because of enrollment increases (or, in some cases in grades 7-12, decreases). These two items together equal the number of additional teachers needed, shown in Table 21.

Table 22 presents these two components of teacher need (teacher termination and enrollment change) for 1986-87 and 1987-88. Column 1 gives the estimated number of teachers in these selected fields for 1985-86. The number of teachers expected to terminate during 1985-86 (Column 2) was calculated by, first, multiplying the total number of teachers for 1985-86 times the termination rate for the most recent year (7.4 percent), and, second, disaggregating this

Table 22  
Number of Teachers Expected to Terminate  
and Projected Need  
Through 1987-88\*  
Selected Fields

Programs	1985-86	1986-87				1987-88			
	Total	TERM	GRO	NEED	TOT	TERM	GRO	NEED	TOT
Tot. Basic	72,025	5,002	2,183	7,185	74,208	5,143	2,172	7,315	76,380
Tot. Excep.	10,688	1,225	323	1,547	11,011	1,259	321	1,580	11,332
Tot. Voc.	6,260	322	14	335	6,274	331	20	351	6,294
Total	88,973	6,548	2,519	9,068	91,492	6,734	2,513	9,247	94,005
Elem. Educ.	31,464	2,035	1,708	3,743	33,173	2,093	1,670	3,763	34,843
English	9,077	718	74	793	9,151	739	82	820	9,232
Math	6,075	460	31	491	6,106	473	37	510	6,142
Science	6,231	483	18	500	6,249	496	24	520	6,273
Soc. Stud.	4,863	351	10	362	4,873	361	16	377	4,889
For. Lang.	2,052	191	32	223	2,084	196	33	230	2,118

\*Taken from Appendix Table A16.

total by subject field according to the distribution of vacancies during fall 1985. Column 3 indicates the difference between the number of teachers needed for 1986-87--based on enrollment projections--and the number for 1985-86. Column 4 is the summation of Columns 2-3, and Column 5 gives the total number of teachers projected for 1986-87. Projections for 1987-88 are shown in Columns 6-9. (Similar information through the year 2000 is shown in Appendix Tables A16-A17.)

### Projections: Teacher Supply Compared with Demand, 1987-88

Projections of graduates of teacher education programs are available only through 1987-88. In the absence of these or any other projections of teacher supply beyond that year, this report focuses on detailed projections of supply and demand for 1988-89, and then makes only general forecasts of teacher supply for the fifteen years beyond.

One way to evaluate the adequacy of the supply of teachers is to compare projected graduates of teacher education programs with the projected number of additional teachers needed. Table 23 presents such a comparison for selected fields. Overall, the number of projected teacher education graduates represents only about 39 percent of the additional number of teachers needed, with the percentages much lower in such fields as science, foreign languages, and industrial arts.

Table 23  
Demand for Teachers Compared to Teacher Education Graduates  
and Projected Need  
Through 1987-88\*

Programs	Additional Teachers Needed			Projected Teacher Graduates			Ratio		
	1	2	3	4	5	6	7	8	9
	1986-87	1987-88	1988-89	1985-86	1986-87	1987-88	4/1	5/2	6/3
Tot. Basic	7,185	7,315	7,627	2,554	2,731	2,923	0.36	0.37	0.38
Tot. Excep.	1,547	1,580	1,640	611	623	683	0.40	0.39	0.42
Tot. Voc.	335	351	345	179	172	177	0.53	0.49	0.51
Total	9,068	9,247	9,611	3,344	3,526	3,783	0.37	0.38	0.39
Elem. Educ.	3,743	3,763	4,026	1,395	1,515	1,608	0.37	0.40	0.40
English	793	820	827	262	265	282	0.33	0.32	0.34
Math	491	510	511	154	173	187	0.31	0.34	0.37
Science	500	520	519	103	122	141	0.20	0.23	0.27
For. Lang.	223	230	235	20	26	29	0.09	0.11	0.12
Emot. Handi.	292	299	309	122	125	148	0.42	0.42	0.48
Ind. Arts	81	84	83	5	8	10	0.06	0.10	0.12

\*Taken from Appendix Table A18.

Table 24  
Number of New Teachers Needed  
Selected Fields\*

Programs	From Vacancy Survey Fall 1985			Estimated New Teachers Needed 1987-88	
	1 Total Number of Vacancies	2 New Teachers Needed**	3 New Teachers as a Percentage of Vacancies (2/1)	4 Number Teachers Needed Excluding Current Out of Field	5 Estimated Number New Teachers Needed (3x4)
Tot. Basic	6,105	4,869	79.8	7,315	5,835
Tot. Excep.	1,495	1,217	81.4	1,580	1,286
Tot. Voc.	393	331	84.2	351	296
Total	7,993	6,418	80.3	9,247	7,425
Elem. Educ.	2,484	1,952	78.6	3,763	2,958
Eng./Lang. Arts	577	718	81.9	820	672
Math	562	456	81.2	510	414
Science	589	486	82.5	520	429
For. Lang.	233	203	87.1	230	200
Emot. Handi.	315	259	82.1	299	246
Ind. Arts	95	80	84.6	84	71

\*Taken from Appendix Table A19.

\*\*Excludes those vacancies filled by teachers who taught the prior year in another Florida school district.

Table 25  
Projected Teacher Supply and Demand  
1987-88  
Selected Fields\*

Programs	1 Total Number Additional Teachers Needed	2 Number Teachers Needed Excluding Current Out of Field	3 Estimated Number New Teachers Needed**	4 Proj. Florida Education Graduates 1986-87	Ratio of Florida Education Graduates to Need		
					(4/1)	(4/2)	(4/3)
Tot. Basic	10,000	7,315	5,835	2,731	0.27	0.37	0.47
Tot. Excep.	2,470	1,580	1,286	623	0.25	0.39	0.48
Tot. Voc.	554	351	296	172	0.31	0.49	0.58
Total	13,024	9,247	7,425	3,526	0.27	0.38	0.47
Elem. Educ.	4,104	3,763	2,958	1,515	0.37	0.40	0.51
Eng./Lang. Arts	1,322	820	672	265	0.20	0.32	0.39
Math	982	510	414	173	0.18	0.34	0.42
Science	1,082	520	429	122	0.11	0.23	0.28
For. Lang.	341	230	200	26	0.08	0.11	0.13
Emot. Handi.	539	299	246	125	0.23	0.42	0.51
Ind. Arts	138	84	71	8	0.06	0.10	0.11

\*Taken from Appendix Table A20.

\*\*Excludes those vacancies to be filled by teachers from other Florida school districts.

Included in the additional-teachers-needed column is one component that should perhaps be subtracted out: an estimate of the number filled each year by teachers from other school districts. At the same time, the number needed leaves out any estimate for the additional number of teachers needed to staff each class with a teacher fully certified in the appropriate subject field. Table 24, taken from Appendix Table A19, illustrates how the first of these components (the percentage of teachers moving from one school district to another) might be estimated, based on data from the 1985 vacancy report. Table 25 shows projections for 1987-88 with and without the out-of-field teachers, and then shows a third set of projections excluding teachers moving from one district to another. Ratios are then shown between each of these indicators of teacher demand and the expected number of Florida teacher education graduates.

Given these projections for 1987-88 (disregarding the number of teachers teaching out of field and taking into account the fact that some vacancies will be filled by existing teachers in other school districts), the number of Florida teacher education graduates represents 51 percent of the elementary teachers needed, 39 percent of the English teachers, 42 percent of the mathematics teachers, and 28 percent of the science teachers, all in a year in which enrollments in secondary courses are projected to be down because of demographic trends. It was suggested in an earlier section of this report that as many as 55 percent of the beginning teachers graduate from Florida teacher education programs. The ratio between the new teachers needed and the projected number of teacher education graduates in all of these fields, except elementary education, falls considerably short of this 55 percent. If the number of out-of-field teachers is included in the equation, even under the most optimistic assumptions about the availability of out-of-field teacher candidates, the supply of new teachers supply would fall far short of the need.

#### Projections: Beyond 1987

As has been stated, projections of graduates of teacher education programs are available only through 1987-88. There are good reasons why long-term projections are available for grade K-12 programs but only short-term projections for graduates of teacher education programs. Enrollments in K-12 programs are chiefly a product of demographic trends. Enrollments within particular higher education programs, however, are determined not only by demography but also by such factors as current economic conditions, perceived

future employment opportunities, the level of salaries and other benefits offered by various occupations, and the relative social status of competing occupations. Therefore, attempts here to make long-range projections of teacher supply are limited to demographic projections of those age groups which provide the largest potential pool for new teachers.

During the next few years the state can expect annual overall enrollment increases of from 30,000 to 60,000--or from 2 to 3 percent--with steady increases continuing until at least the year 2000. Trends by grade level show irregularities not seen when viewing the education system as a whole. Table 26 looks at the percentage of differences at five-year intervals in enrollments at the elementary and secondary level, and the corresponding population differences in the 22-24 and 25-29 age groups, the age groups which might be regarded as providing the biggest pool for beginning teachers. The base year for these comparisons is 1980, the last census year.

Table 26 projects a 27-percent increase in grades K-6 enrollment from 1985 to 1990 and an 11-percent increase from 1990 to 1995. The enrollment in grades 7-12 is projected to decrease by 0.9 percent from 1985 to 1990, but increase by 21 percent from 1990 to 1995 and by an additional 20 percent from 1995 to 2000. Overall, from 1985 to 2000 grades K-6 are projected to increase by 40 percent and grades 7-12 by 44.5 percent.

Table 26  
Percentage Change  
In Enrollments,  
and Number of Young Adults  
1980-2000

	P E R C E N T A G E C H A N G E				Total
	1980 to 1985	1985 to 1990	1990 to 1995	1995 to 2000	1985 to 2000
Grades K-6	3.4	26.6	10.9	-0.1	40.3
Grades 7-12	5.3	-0.9	21.2	20.3	44.5
<u>Total</u>	<u>4.3</u>	<u>13.6</u>	<u>15.2</u>	<u>8.7</u>	<u>42.3</u>
Number of Classroom Teachers	10.3	12.9	15.4	9.2	42.3
Ages 22-24	13.2	-9.9	0.8	-6.4	-15.0
Ages 25-29	20.8	7.2	-10.9	-4.6	-8.8
<u>Total</u>	<u>17.8</u>	<u>0.7</u>	<u>-6.9</u>	<u>-5.2</u>	<u>11.2</u>

The projected changes in the 22-24-year-old and 25-29-year-old age groups provide a sharp contrast to the K-12 trends. During the 1980-85 period, when the youngest of the children born during the post-World War II baby boom were becoming adults, these age groups increased by 18 percent. What is significant, therefore, is that the state has been experiencing shortages in specific teaching fields during a period when, on one hand, school enrollments have been stable (at least until 1984-85) and, on the other, the pool of potential teachers has been increasing.

The next fifteen years present a completely different demographic picture. As indicated in Table 26, the number of 22 to 24 year olds is projected to decrease by 10 percent from 1985 to 1990 and by 6 percent more by 2000. According to the same projections, the 25-29 year age group, still feeling the impact of the baby boom, will increase by 7 percent from now until 1990, followed by a decrease of 15 percent from 1990 to 2000.

The nation as a whole, without Florida's high in-migration trends, will doubtless see proportionately larger decreases in these age groups than those shown in Table 26. Thus the pool of out-of-state new teachers on which Florida has long relied can be expected to decrease at an even faster rate than the in-state pool.

These two trends--an projected increased enrollment in grades K-12 and a projected smaller potential teacher pool--taken together present a bleak picture for a long-term balance between teacher supply and demand in Florida. The five years from 1985 to 1990 will mark the beginning of a significant decrease in the size of the teacher pool. It is fortunate that during that period secondary school enrollments will also be decreasing. However, as has been pointed out, the current shortages have occurred during a period when the size of the potential teacher pool was increasing. Therefore, it would seem that, unless the state can influence many more people to make teaching their career choice or can tap additional groups of potential teachers in addition to young adults, the state will find it much harder to fill positions in critical fields in the next five years than it did during the five prior years. And beyond 1990 the potential imbalance between supply and demand is even more critical, as the size of the potential teacher pool continues to decline at the same time secondary school enrollments are sharply increasing.

Another way of looking at the gap between supply and demand can be seen in Table 27, which projects the number of Florida education graduates from 1986 to 2000. (These projections are based on the number of graduates in 1985,



and are not adjusted downwards to reflect a smaller population base nor adjusted upwards to reflect increases arising from measures already being taken to increase enrollments in critical areas.) Although, overall, the number of graduates represent 30 percent of the need, in critical fields the number of projected graduates as a percentage of the need is much lower--for instance, 20 percent in language arts, 15 percent in mathematics, and 9 percent in science.

Table 27  
Teacher Projections  
1986 - 2000

	Projected Number of Teacher Vacancies				Projected Total Number of Florida Education Graduates 1986-2000*
	From 1986-1990	From 1991-1995	From 1996-2000	Total 1986-2000	
Elem	19,100	16,500	13,750	49,400	20,600
Eng/Lang. Arts	4,000	6,100	6,850	16,950	3,400
Math	2,450	4,000	4,550	11,000	1,600
Science	2,500	4,200	4,800	11,500	1,000
Foreign Lang.	1,150	1,550	1,650	4,350	300
Total Basic	36,450	42,250	42,000	120,700	35,900
Total Exceptional	7,950	9,150	9,500	26,600	8,300
Total Vocational	1,650	3,250	3,700	8,600	2,300
Total	46,050	54,650	55,200	155,900	46,500

\*This column is based on the total number of Florida teacher education graduates in 1985. In other words, the numbers represent the total number of graduates from 1986 to 2000 if no additional college students select teacher education as a major each year.

## MEASURES FOR ATTRACTING TEACHERS

In 1983 the State of Florida began implementing programs to offset teacher shortages, particularly in critical teaching areas. The measures taken were designed to attract capable and promising students to the teaching profession in areas of critical teacher shortages, to assist current teachers in acquiring new subject matter knowledge so they could teach in shortage areas, and to help recruit qualified teachers in shortage areas from both in and outside of Florida. Among these measures were various teacher financial aid programs (specifically, the Teacher Scholarship Loan Program, the Critical Teacher Shortage Tuition Reimbursement Program, the Student Loan Forgiveness Program, the "Chappie" James Most Promising Teacher Scholarship Program, and the Masters' Fellowship Loan Program for Teachers), the Alternate Certification Program for Secondary School Teachers, and the Teacher Referral and Recruitment Center.<sup>4</sup>

Although it is still too early to evaluate their effectiveness in increasing the supply of teachers in Florida, this section provides summary status reports for each of the programs.

### Teacher Financial Aid Programs

Awards for three of the teacher financial aid programs--the Teacher Scholarship Loan Program, the Tuition Reimbursement Program, and the Student Loan Forgiveness Program--were first made during 1983-84. As shown in Table 28, during the first two start-up years all eligible applicants received awards. By 1985-86, and particularly by 1986-87, the awards had become more competitive. The first awards for the "Chappie" James Most Promising Teacher Scholarship and the Masters' Fellowship Loan programs were for the 1986-87 school year.

Including 1986-87, a total of 1,360 loans have been awarded to 865 individuals, some for more than one year. These awards do not include the Tuition Reimbursement and the Loan Forgiveness programs. As of September 1986, 376 of the loan recipients were still in college, while 353 were in the grace period for repaying loans. Of the 139 whose first career decisions had been made, 71, or 51.1 percent, were

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<sup>4</sup>A copy of implementing legislation for each of these programs may be found in Appendix B, along with a contact person to telephone for more information.

Table 28  
Teacher Financial Aid Programs  
Number of Awards

PROGRAM	1983-84		1984-85		1985-86		1986-87	
	Elig.	Awarded	Elig.	Awarded	Elig.	Awarded	Elig.	Awarded
Teacher Scholarship Loan	111	111	180	180	396	396	669	376
Tuition Reimbursement	306	306	511	511	1,000*	900*	N/U	N/U
Student Loan Forgiveness	23	23	39	39	71*	71*	N/U	N/U
"Chappie" James	N/A	N/A	N/A	N/A	N/A	N/A	398	280
Masters' Fellowship Loan	N/A	N/A	N/A	N/A	N/A	N/A	17	17

Elig. = Number eligible applicants. N/A = Not Applicable. N/U = Number Unknown.  
\*Estimated

known to be teaching (25 of whom had completed their minimum requirements for the cancelling of their loans), and 62, or 44.6 percent, had chosen not to teach, but to repay their loans. Four of these latter had completed the repayment. Five of the remaining recipients had had their repayment temporarily deferred (giving them additional time to either begin teaching or begin repayment) and one loan had been cancelled because of death of the recipient.

The legislation implementing the three 1983 programs specified that during the first two years of the programs at least 50 percent of the awards had to be in the areas of mathematics and science, with the remaining awards going to individuals intending to teach in one of the other critical teacher shortage areas. The recipients' academic programs are continually monitored to make sure the recipients are enrolled in an appropriate major. Current state statutes do not require teacher-recipients to teach in a critical teacher shortage area in order for the scholarship loan to be repaid by teaching service. At this time the processing system does not compile the actual subject areas in which the recipients are teaching. New computer systems now being developed will make it possible to better track recipients after they graduate and begin teaching or repaying their loans.

### Alternative Certification Program

Florida's Alternative Certification Program was set up in 1984 as an experimental program for the purpose of attracting arts and sciences graduates to teach in the secondary schools, particularly in areas of critical

shortages. Individuals receiving teacher certification under this program must have a bachelor's degree, a grade point average of 2.75 or above, a passing score on the Florida Teacher Certification Examination, and must have successfully completed a beginning teacher program particularly modified for their needs.

In order to implement this program, school districts are required to develop a plan and have it approved by the Department of the Education. Districts are encouraged to collaborate with colleges of education in developing and implementing their plans. During the first two years of the program eight districts have had plans approved: Brevard, Broward, Dade, Gadsden, Palm Beach, Pinellas, Suwannee, and Volusia. During 1985-86 four individuals from Dade and one from Suwannee were certified upon completion of the program. There are approximately 30 people in the program during 1986-87.

Various reasons have been given why more districts have not submitted plans or why thus far only a few individuals have received certification via this alternative route. In order to provide for early implementation of the program, during the summer of 1985 the Department of Education designed training packets for summer workshops. Although some districts were at first enthusiastic about initiating workshops, they found many interested individuals had already made summer commitments. Districts also found the summer workshop route was often not practical because they did not know until school opened how many vacancies they had which could not be filled by individuals certifiable by means of the regular certification process. Many medium-sized and small districts found they did not have the capability of providing adequate in-service support for untrained teacher candidates.

During January and February 1986 a survey was conducted by the Department of Education to determine how district personnel directors felt about participating in the Alternative Certification Program. Although there was a poor response to the survey, those personnel directors who did respond gave such reasons for not participating as: "My district does not have the resources for implementing this program"; "The funds for maintaining a candidate [\$900 per candidate] are insufficient"; and "We do not need this program since we have enough candidates to fill our vacancies."

Two changes in policy may increase the number of individuals being certified by way of this alternative route. First, modifications being made during the 1986-87 school year are enabling districts to offer most of their in-service

component after the teacher begins teaching. Second, beginning in 1988, no teacher may receive more than one two-year temporary certificate. Under the traditional course credit route, earning sufficient credits for certification within this two-year period would be extremely difficult. These two changes may make alternative certification more attractive both to the school districts and to arts and sciences graduates interested in teaching.

### The Teacher Recruitment Center

Florida's Teacher Referral and Recruitment Center was established in 1985 under the auspices of the Department of Education's Center for Career Development Services. The primary goals of the Center are to attract high quality teachers to Florida and to produce materials to encourage young people to consider teaching as a career.

The Center maintains a centralized mailing address and toll-free telephone numbers to provide immediate information about teaching opportunities in Florida and a computerized listing of teacher applicant resumes and teaching vacancies within the state. The Center also publishes and distributes brochures promoting financial incentives for beginning and continuing teachers and alternative certification procedures, advertises its services in selective states experiencing teacher layoffs, and sponsors Future Educators of America chapters in Florida schools.

A computerized record system is now being installed which will enable the Center to keep statistics on the number of referrals and placement of teachers, as well as to provide more effective tracking of district vacancies. Heretofore teacher applications have been kept in a paper file. Districts have sent in reports of vacancies sporadically, usually listing only those fields which they are having difficulty filling. It is hoped that once the computer system is in place, many districts will send a weekly update of all vacancies.

Although the Center for Career Development Services was already handling some information on teacher vacancies informally, its Teacher Referral and Recruitment Center was not operational until October 1985. Requests for service grew throughout the year. The first full year of operation indicates the bulk of the requests for services may be expected from May through August. More than half of the telephone calls from prospective teachers have been from outside Florida.



The most widely-publicized activity sponsored by the Center during its first year was the recruitment fair, held in Orlando from June 18-20, 1986, and dubbed the Great Florida Teach-In. Planning for the event began in October 1985. Within the state, publicity included sending a brochure and registration form to 1985-86 graduates of Florida teacher education programs. Nationally, the Center sent posters to deans of education and placement directors at 350 colleges east of the Mississippi and advertised in seven large metropolitan newspapers in the Midwest and Northeast. In its contacts with colleges and universities, the Center particularly targeted colleges with minority enrollments of at least 20 percent.

As a result of the campaign, 1,518 applicants (including both prospective and experienced teachers) and administrators of 43 of the 67 school districts came to the Teach-in. District efforts to promote their school systems ranged from small districts which sent only one representative to one large district which not only brought several recruiters but a multimedia show employing 18 projectors. Department of Education staff were present to answer questions on teacher certification and teacher scholarship loan programs. Also available were fingerprinting services and information on statewide banking and realty services.

By the end of the fair 244 teachers had signed teaching contracts. District personnel directors reported they anticipated offering an additional 550 to 650 contracts to the candidates interviewed at the Teach-In by the fall 1986 opening of school. The consensus of opinion of district personnel representatives attending the fair, expressed in a telephone survey conducted by the Center two weeks later, was that the teachers interviewed were by far the best-qualified teachers and teacher candidates they had spoken to at any recruitment fair.

The Center plans to conduct a similar recruiting fair annually, building on the experience gained in the first statewide effort.



APPENDIX A  
SUPPLEMENTARY TABLES

- Table A1: Estimated Number of Vacancies, Fall 1985
- Table A2: Estimated Number of New Teachers Needed, Fall 1985
- Table A3: Analysis of New Hires, Fall 1985
- Table A4: Analysis of Vacancies, Fall 1985
- Table A5: Percentage Change in Number of Teacher Vacancies,  
Fall 1982 - Fall 1985
- Table A6: Number of Teacher Vacancies, Fall 1982 - Fall 1985
- Table A7: Number of Teacher Vacancies by School District
- Table A8: Number of Teachers Teaching Out of Field
- Table A9: Number of Graduates from Teacher Education Programs
- Table A10: Number of Graduates Compared to Projected
- Table A11: Number of Graduates, 1981-82 - 1987-88
- Table A12: Newly Certified Teachers
- Table A13: Certificates Issued To Graduates of Florida Colleges  
and Universities
- Table A14: Number of First-Year Teachers by School District
- Table A15: Projected Number of Teachers Needed Through 2000-01
- Table A16: Teachers Expected to Terminate and Projected Need  
through 1988-89
- Table A17: Teachers Expected to Terminate and Projected Need  
from 1989-90 to 2000-01
- Table A18: Demand for Teachers Compared to Teacher Education  
Graduates and Projected Need through 1988-89
- Table A19: Number of New Teachers Needed
- Table A20: Projected Teacher Supply and Demand

Table A1  
Estimated Number of Vacancies  
Florida School Districts  
Fall 1985

Subject Fields	N E W H I R E S					
	Certified		Not Certified In the Appropriate Field	Total Number of New Hires	Number of Unfilled Vacancies	Total Number of Vacancies
	Taught Last Year in Another Florida School District	Did Not Teach Last Year In a Florida School District				
Elem. Educ.	532	1,757	80	2,369	115	2,484
Eng./Lang. Arts	159	631	44	834	43	877
Math	106	390	43	539	23	562
Science	103	402	64	569	20	589
Soc. Stud.	70	314	28	412	17	429
For. Lang.	30	174	22	226	7	233
Health/PE	102	224	9	335	25	360
Art	67	140	5	212	7	219
Music	49	181	5	235	16	251
Computer	7	28	1	36	5	41
Intens. Eng/ESOL	9	38	0	47	13	60
<u>Tot. Basic</u>	<u>1,236</u>	<u>4,277</u>	<u>302</u>	<u>5,815</u>	<u>290</u>	<u>6,105</u>
Hand. Handi.	28	132	31	191	30	221
Occ/Phy. Ther.	1	12	0	13	11	24
Phy. Imp.	0	16	8	24	4	28
Speech Ther.	39	139	7	185	25	210
Hear/Visual	16	36	2	54	4	58
SLD	80	204	43	327	25	352
Emot. Handi.	56	143	93	292	23	315
Gifted	21	28	31	80	8	88
Hosp./Home	2	10	0	12	0	12
Var. Excep.	37	106	29	172	15	187
<u>Tot. Excep.</u>	<u>278</u>	<u>828</u>	<u>244</u>	<u>1,350</u>	<u>145</u>	<u>1,495</u>
Agri.	8	31	2	41	3	44
Bus.	13	48	4	65	1	66
Dist.	1	10	3	14	3	17
Health	1	10	1	12	0	12
Pub. Serv.	1	1	0	2	0	2
Home Econ.	11	59	1	71	5	76
Trades/Ind.	12	56	5	73	8	81
Ind. Arts	15	59	7	81	14	95
<u>Tot. Voc.</u>	<u>62</u>	<u>274</u>	<u>23</u>	<u>359</u>	<u>34</u>	<u>393</u>
<u>Total</u>	<u>1,575</u>	<u>5,380</u>	<u>569</u>	<u>7,524</u>	<u>469</u>	<u>7,993</u>

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Table A2  
Estimated Number of New Teachers Needed\*  
Florida School Districts  
Fall 1985

Subject Fields	<u>N E W     H I R E S</u>		Number of Unfilled Vacancies	Total Number of New Teachers Needed
	Certified Did Not Teach Last Year In a Florida School District	Not Certified In the Appropriate Field		
Elem. Educ.	1,757	80	115	1,952
Eng./Lang. Arts	631	44	43	718
Math	390	43	23	456
Science	402	64	20	486
Soc. Stud.	314	28	17	359
For. Lang.	174	22	7	203
Health/PE	224	9	25	258
Art	140	5	7	152
Music	181	5	16	202
Computer	28	1	5	34
Intens. Eng/ESOL	38	0	13	51
<u>Tot. Basic</u>	4,277	302	290	4,869
Mont. Handi.	132	31	30	193
Occ/Phy. Ther.	12	0	11	23
Phy. Imp.	16	8	4	28
Speech Ther.	139	7	25	171
Hear/Visual	36	2	4	42
SLD	204	43	25	272
Emot. Handi.	143	93	23	259
Gifted	28	31	8	67
Hosp./Home	10	0	0	10
Var. Excep.	106	29	15	150
<u>Tot. Excep.</u>	828	244	145	1,217
Agri.	31	2	3	36
Bus.	48	4	1	53
Dist.	10	3	3	16
Health	10	1	0	11
Pub. Serv.	1	0	0	1
Home Econ.	59	1	5	65
Trades/Ind.	56	5	8	69
Ind. Arts	59	7	14	80
<u>Tot. Voc.</u>	274	23	34	331
<u>Total</u>	5,380	569	469	6,418

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Table A3  
Analysis of New Hires  
Florida School Districts  
Fall 1985

Subject Fields	Total Number of New Hires	<u>C E R T I F I E D</u>		Total Percentage Certified In The Appropriate Field	New Hires Percentage Not Certified In The Appropriate Field
		Percentage Taught Last Year in Another Florida School District	Percentage Did Not Teach Last Year In a Florida School District		
Elem. Educ.	2,369	23.2	76.8	96.6	3.4
Eng./Lang. Arts	834	20.1	79.9	94.7	5.3
Math	539	21.4	78.6	91.9	8.1
Science	569	20.4	79.6	88.8	11.2
Soc. Stud.	412	18.1	81.9	93.2	6.8
For. Lang.	226	14.8	85.2	90.3	9.7
Health/PE	335	31.2	68.8	97.3	2.7
Art	212	32.5	67.5	97.6	2.4
Music	235	21.4	78.6	97.9	2.1
Computer	36	19.4	80.6	97.2	2.8
Intens. Eng/ESOL	47	18.6	81.4	100.0	0.0
<u>Tot. Basic</u>	5,815	22.4	77.6	94.8	5.2
Ment. Handi.	191	17.3	82.7	83.8	16.2
Occ/Phy. Ther.	13	7.7	92.3	100.0	0.0
Phy. Imp.	24	0.0	100.0	66.7	33.3
Speech Ther.	185	21.7	78.3	96.2	3.8
Hear/Visual	54	31.4	68.6	96.3	3.7
SLD	327	28.3	71.7	86.9	13.1
Emot. Handi.	292	28.3	71.7	68.2	31.8
Gifted	80	41.9	58.1	61.2	38.8
Hosp./Home	12	16.7	83.3	100.0	0.0
Var. Excep.	172	26.1	73.9	83.1	16.9
<u>Tot. Excep.</u>	1,350	25.2	74.8	81.9	18.1
Agri.	41	21.6	78.4	95.1	4.9
Bus.	65	21.8	78.2	93.8	6.2
Dist.	14	10.0	90.0	78.6	21.4
Health	12	9.1	90.9	91.7	8.3
Pub. Serv.	2	50.0	50.0	100.0	0.0
Home Econ.	71	15.9	84.1	98.6	1.4
Trades/Ind.	73	16.9	83.1	93.2	6.8
Ind. Arts	81	19.7	80.3	91.4	8.6
<u>Tot. Voc.</u>	359	18.5	81.5	93.6	6.4
<u>Total</u>	7,524	22.6	77.4	92.4	7.6

Table A4  
Analysis of Vacancies  
Florida School Districts  
Fall 1985

Subject Fields	Estimated Number of Vacancies	V A C A N C I E S					Vacancies Unfilled or Filled Out of Field Number Percentage	
		Percentage Filled						
		By New Hires						
		Certified In The Appropriate Field	Not Certified In The Appropriate Field	Percentage Unfilled				
Elem. Educ.	2,484	92.1	3.2	4.6	195	7.9		
Eng./Lang. Arts	877	90.1	5.1	4.8	87	9.9		
Hath	562	88.3	7.7	4.0	66	11.7		
Science	589	85.7	10.9	3.4	84	14.3		
Soc. Stud.	429	89.5	6.5	4.0	45	10.5		
For. Lang.	233	87.6	9.4	3.0	29	12.4		
Health/PE	360	90.6	2.5	6.9	34	9.4		
Art	219	94.5	2.3	3.2	12	5.5		
Music	251	91.6	2.0	6.4	21	8.4		
Computer	41	85.4	2.4	12.2	6	14.6		
Intens. Eng/ESOL	60	78.3	0.0	21.7	13	21.7		
<u>Tot. Basic</u>	6,105	90.3	4.9	4.8	592	9.7		
Ment. Handi.	221	72.4	14.0	13.6	61	27.6		
Occ/Phy. Ther.	24	54.2	0.0	45.8	11	45.8		
Phy. Imp.	28	57.1	28.6	14.3	12	42.9		
Speech Ther.	210	84.8	3.3	11.9	32	15.2		
Hear/Visual	58	89.7	3.4	6.9	6	10.3		
SLD	352	80.7	12.2	7.1	68	19.3		
Emot. Handi.	315	63.2	29.5	7.3	116	36.8		
Gifted	88	55.7	35.2	9.1	39	44.3		
Hosp./Home	12	100.0	0.0	0.0	0	0.0		
Var. Excep.	187	76.5	15.5	8.0	44	23.5		
<u>Tot. Excep.</u>	1,495	74.0	16.3	9.7	389	26.0		
Agri.	44	88.6	4.5	6.8	5	11.4		
Bus.	66	92.4	6.1	1.5	5	7.6		
Dist.	17	64.7	17.6	17.6	6	35.3		
Health	12	91.7	8.3	0.0	1	8.3		
Pub. Serv.	2	100.0	0.0	0.0	0	0.0		
Home Econ.	76	92.1	1.3	6.6	6	7.9		
Trades/Ind.	81	84.0	6.2	9.9	13	16.0		
Ind. Arts	95	77.9	7.4	14.7	21	22.1		
<u>Tot. Voc.</u>	393	85.5	5.9	8.7	57	14.5		
<u>Total</u>	7,993	87.0	7.1	5.9	1,038	13.0		

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Table A5  
Percentage Change in Number of Teacher Vacancies  
Fall 1982 - Fall 1985

Subject Field	Vacancies Fall 1982	Vacancies Fall 1983	Percentage Change	Vacancies Fall 1984	Percentage Change	Vacancies Fall 1985	Percentage Change
Elem. Educ.	1,695	1,742	2.8	2,032	16.6	2,484	22.2
Eng./Lang. Arts	726	852	17.4	960	12.7	877	-8.6
Math	474	521	9.9	668	28.1	562	-15.8
Science	345	506	46.7	797	57.5	589	-26.1
Soc. Stud.	211	298	41.2	487	63.4	429	-11.9
For. Lang.	85	107	25.9	249	132.7	233	-6.4
Health/PE	301	254	-15.6	359	41.3	360	0.3
Art	92	85	-7.6	150	76.5	219	46.0
Music	234	226	-3.4	240	6.2	251	4.6
Computer	0	6	0.0	33	450.0	41	24.2
Intens. Eng/ESOL	60	54	-10.0	32	-40.7	60	87.5
<u>Tot. Basic</u>	<u>4,223</u>	<u>4,651</u>	<u>10.1</u>	<u>6,007</u>	<u>29.1</u>	<u>6,105</u>	<u>1.6</u>
Ment. Handi.	233	202	-13.3	239	18.3	221	-7.5
Occ/Phy. Ther.	29	30	3.4	34	11.7	24	-28.4
Phy. Imp.	10	17	70.0	15	-11.8	28	86.7
Speech Ther.	185	163	-11.9	199	22.1	210	5.5
Hear/Visual	60	49	-18.3	48	-2.0	58	20.8
SLD	288	284	-1.4	298	4.8	352	18.3
Emot. Handi.	264	261	-1.1	309	18.4	315	1.9
Gifted	68	74	8.8	99	33.8	88	-11.1
Hosp./Home	5	14	180.0	18	28.6	12	-33.3
Var. Excep.	99	91	-8.1	121	33.0	187	54.5
<u>Tot. Excep.</u>	<u>1,241</u>	<u>1,185</u>	<u>-4.5</u>	<u>1,379</u>	<u>16.4</u>	<u>1,495</u>	<u>8.4</u>
Agri.	53	50	-5.7	54	8.0	44	-18.5
Bus.	102	98	-3.9	135	37.8	66	-51.1
Dist.	24	20	-16.7	27	35.0	17	-37.0
Health	25	29	16.0	17	-41.4	12	-29.4
Pub. Serv.	13	3	-76.9	3	0.0	2	-33.3
Home Econ.	62	65	4.8	135	107.7	76	-43.7
Trades/Ind.	137	156	13.9	90	-42.3	81	-10.0
Ind. Arts	46	50	8.7	74	48.0	95	28.4
<u>Tot. Voc.</u>	<u>462</u>	<u>471</u>	<u>1.9</u>	<u>535</u>	<u>13.6</u>	<u>393</u>	<u>-26.5</u>
<u>Total</u>	<u>5,926</u>	<u>6,307</u>	<u>6.4</u>	<u>7,921</u>	<u>25.6</u>	<u>7,993</u>	<u>0.9</u>



Table A6  
Number of Teacher Vacancies  
Fall 1982 - Fall 1985

Subject Field	Vacancies				Vacancies in Each Field as a Percentage of all Vacancies			
	Fall 1982	Fall 1983	Fall 1984	Fall 1985	Fall 1982	Fall 1983	Fall 1984	Fall 1985
Elem. Educ.	1,695	1,742	2,032	2,484	28.6	27.6	25.7	31.1
Eng./Lang. Arts	726	852	960	877	12.3	13.5	12.1	11.0
Math	474	521	668	562	8.0	8.3	8.4	7.0
Science	345	506	797	589	5.8	8.0	10.1	7.4
Soc. Stud.	211	298	487	429	3.6	4.7	6.1	5.4
For. Lang.	85	107	249	233	1.4	1.7	3.1	2.9
Health/PE	301	254	359	360	5.1	4.0	4.5	4.5
Art	92	85	150	219	1.6	1.3	1.9	2.7
Music	234	226	240	251	3.9	3.6	3.0	3.1
Computer	0	6	33	41	0.0	0.1	0.4	0.5
Intens. Eng/ESOL	60	54	32	60	1.0	0.9	0.4	0.8
<u>Tot. Basic</u>	<u>4,223</u>	<u>4,651</u>	<u>6,007</u>	<u>6,105</u>	<u>71.3</u>	<u>73.7</u>	<u>75.8</u>	<u>76.4</u>
Ment. Handi.	233	202	239	221	3.9	3.2	3.0	2.8
Occ/Phy. Ther.	29	30	34	24	0.5	0.5	0.4	0.3
Phy. Imp.	10	17	15	28	0.2	0.3	0.2	0.4
Speech Ther.	185	163	199	210	3.1	2.6	2.5	2.6
Hear/Visual	60	49	48	58	1.0	0.8	0.6	0.7
SLD	288	284	298	352	4.9	4.5	3.8	4.4
Emot. Handi.	264	261	309	315	4.5	4.1	3.9	3.9
Gifted	68	74	99	88	1.1	1.2	1.2	1.1
Hosp./Home	5	14	18	12	0.1	0.2	0.2	0.2
Var. Excep.	99	91	121	187	1.7	1.4	1.5	2.3
<u>Tot. Excep.</u>	<u>1,241</u>	<u>1,185</u>	<u>1,379</u>	<u>1,495</u>	<u>20.9</u>	<u>18.8</u>	<u>17.4</u>	<u>18.7</u>
Agri.	53	50	54	44	0.9	0.8	0.7	0.6
Bus.	102	98	135	66	1.7	1.6	1.7	0.8
Dist.	24	20	27	17	0.4	0.3	0.3	0.2
Health	25	29	17	12	0.4	0.5	0.2	0.2
Pub. Serv.	13	3	3	2	0.2	0.0	0.0	0.0
Home Econ.	62	65	135	76	1.0	1.0	1.7	1.0
Trades/Ind.	137	156	90	81	2.3	2.5	1.1	1.0
Ind. Arts	46	50	74	95	0.8	0.8	0.9	1.2
<u>Tot. Voc.</u>	<u>462</u>	<u>471</u>	<u>535</u>	<u>393</u>	<u>7.8</u>	<u>7.5</u>	<u>6.8</u>	<u>4.9</u>
<u>Total</u>	<u>5,926</u>	<u>6,307</u>	<u>7,921</u>	<u>7,993</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

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Table A7  
Number of Teacher Vacancies  
Fall 1984 - Fall 1985  
By School District

Counties	Fall 1984								Fall 1985								Percentage Change in Total Vacancies 1983-1984
	New Hires		Positions Un-filled	Total Vac.	Percentage Vacancies Unfilled/		Percentage of all Teachers	New Hires		Positions Un-filled	Total Vac.	Percentage Vacancies Unfilled/		Percentage of all Teachers			
	In Field	Out of Field			In Field	Out of Field		In Field	Out of Field								
Alachua	200	9	2	211	94.8	5.2	16.4	167	7	0	174	96.0	4.0	13.2	-17.5		
Baker	34	10	1	45	75.6	24.4	23.3	21	9	0	30	70.0	30.0	15.8	-33.3		
Bay	80	27	1	108	74.1	25.9	9.4	60	2	3	65	92.3	7.7	5.8	-39.8		
Bradford	15	3	2	20	75.0	25.0	7.1	31	2	0	33	93.9	6.1	13.5	65.0		
Brevard	70	53	0	123	56.9	43.1	4.9	223	76	0	299	74.6	25.4	11.1	143.1		
Broward	502	18	49	569	88.2	11.8	8.5	545	10	47	602	90.5	9.5	8.7	5.8		
Calhoun	4	1	0	5	80.0	20.0	4.6	8	0	0	8	100.0	0.0	7.3	60.0		
Charlotte	63	2	2	67	94.0	6.0	15.7	52	4	0	56	92.9	7.1	12.1	-16.4		
Citrus	86	0	0	86	100.0	0.0	15.8	31	48	0	79	39.2	60.8	14.0	-8.1		
Clay	107	15	4	126	84.9	15.1	13.2	66	20	2	88	75.0	25.0	8.2	-30.2		
Collier	95	8	3	106	89.6	10.4	12.6	52	12	2	66	78.8	21.2	7.6	-37.7		
Columbia	37	5	0	42	88.1	11.9	10.7	30	2	0	32	93.8	6.3	8.1	-23.8		
Dade	47	200	27	274	17.2	82.8	2.2	446	10	104	560	79.6	20.4	4.4	104.4		
DeSoto	23	0	0	23	100.0	0.0	10.0	30	1	0	31	96.8	3.2	14.2	34.8		
Dixie	9	1	0	10	90.0	10.0	10.2	6	1	0	7	85.7	14.3	7.5	-30.0		
Duval	406	15	9	430	94.4	5.6	8.2	406	17	25	448	90.6	9.4	8.4	4.2		
Escambia	205	4	0	209	98.1	1.9	8.5	145	1	0	146	99.3	0.7	6.0	-30.1		
Flagler	18	0	0	18	100.0	0.0	13.8	23	1	0	24	95.8	4.2	17.3	33.3		
Franklin	18	0	0	18	100.0	0.0	16.4	11	0	0	11	100.0	0.0	11.5	-38.9		
Gadsden	31	0	2	33	93.9	6.1	6.8	40	0	4	44	90.9	9.1	9.1	33.3		
Gilchrist	21	0	0	21	100.0	0.0	24.1	6	3	0	9	66.7	33.3	9.9	-57.1		
Glades	12	1	0	13	92.3	7.7	25.0	9	0	0	9	100.0	0.0	17.0	-30.8		
Gulf	13	4	0	17	76.5	23.5	12.9	23	2	0	25	92.0	8.0	17.9	47.1		
Hamilton	16	5	0	21	76.2	23.8	16.3	13	3	0	16	81.3	18.8	12.4	-23.8		
Hardee	21	2	1	24	87.5	12.5	9.6	14	0	0	14	100.0	0.0	5.5	-41.7		
Hendry	51	7	2	60	85.0	15.0	20.6	33	5	0	38	86.8	13.2	12.9	-36.7		
Hernando	71	6	5	82	86.6	13.4	18.4	74	4	3	81	91.4	8.6	15.9	-1.2		
Highlands	46	3	3	52	88.5	11.5	12.4	36	8	2	46	78.3	21.7	10.6	-11.5		
Hillsborough	435	59	70	564	77.1	22.9	8.7	583	59	37	679	85.9	14.1	9.9	20.4		
Holmes	14	3	0	17	82.4	17.6	8.9	2	0	0	2	100.0	0.0	1.1	-88.2		
Indian River	74	6	2	82	90.2	9.8	16.0	52	7	0	59	88.1	11.9	11.0	-28.0		
Jackson	30	0	0	30	100.0	0.0	6.4	28	1	1	30	93.3	6.7	6.5	0.0		
Jefferson	18	4	0	22	81.8	18.2	16.2	27	1	0	28	96.4	3.6	20.6	27.3		
Lafayette	4	1	0	5	80.0	20.0	9.1	7	0	0	7	100.0	0.0	12.5	40.0		
Lake	97	21	9	127	76.4	23.6	12.7	85	14	9	108	78.7	21.3	10.6	-15.6		

Counties	Fall 1984								Fall 1985							
	New Hires		Positions Un- filled	Total Vac.	Percentage Vacancies		Percentage of all Teachers	Vacancies as a Percentage of all Teachers	New Hires		Positions Un- filled	Total Vac.	Percentage Vacancies		Percentage of all Teachers	Percentage Change in Total Vacancies 1983-1984
	In	Out of			In	Out of			In	Out of			In	Out of		
	Field	Field	filled		Field	Field			Field	Field	filled		Field	Field	Teachers	
Lee	99	48	20	167	59.3	40.7	9.6		157	16	3	176	89.2	10.8	9.5	5.4
Leon	131	6	7	144	91.0	9.0	10.7		105	1	6	112	93.7	6.2	8.2	-22.2
Levy	38	5	0	43	88.4	11.6	16.5		25	9	2	36	69.4	30.6	14.0	-16.3
Liberty	7	0	0	7	100.0	0.0	11.1		3	0	0	3	100.0	0.0	4.8	-57.1
Madison	35	2	0	37	94.6	5.4	19.9		17	5	0	22	77.3	22.7	11.7	-40.5
Manatee	101	3	0	104	97.1	2.9	8.3		86	8	0	94	91.5	8.5	7.3	-9.6
Marion	138	19	0	157	87.9	12.1	11.0		179	32	3	214	83.6	16.4	14.7	36.3
Martin	96	7	8	111	86.5	13.5	19.1		52	7	5	64	81.3	18.8	11.0	-42.3
Monroe	51	0	0	51	100.0	0.0	13.0		53	0	0	53	100.0	0.0	13.2	3.9
Nassau	30	8	3	41	74.1	25.9	10.9		34	9	4	47	72.3	27.7	12.7	16.0
Okaloosa	105	4	0	109	96.3	3.7	8.0		91	6	0	97	93.8	6.2	7.2	-11.0
Okeechobee	27	2	1	30	90.0	10.0	11.2		28	8	3	39	71.8	28.2	14.2	30.0
Orange	407	29	50	486	83.7	16.3	10.1		476	29	50	555	85.8	14.2	11.2	14.2
Osceola	71	1	5	77	92.2	7.8	13.2		88	5	6	99	88.9	11.1	16.3	28.6
Palm Beach	394	37	112	543	72.6	27.4	12.1		506	12	51	569	88.9	11.1	11.4	4.8
Pasco	187	5	8	200	93.5	6.5	13.0		116	8	23	147	78.9	21.1	9.4	-26.5
Pinellas	573	0	19	592	96.8	3.2	11.2		391	0	11	402	97.3	2.7	7.4	-32.1
Polk	221	62	10	293	75.4	24.6	7.9		236	9	42	287	82.2	17.8	8.1	-2.0
Putnam	60	9	4	73	82.2	17.8	12.7		54	9	0	63	85.7	14.3	10.8	-13.7
St. Johns	62	4	1	67	92.5	7.5	12.2		68	0	1	69	98.6	1.4	12.1	3.0
St. Lucie	42	70	10	122	34.4	65.6	14.6		92	19	12	123	74.8	25.2	13.7	0.8
Santa Rosa	80	3	0	83	96.4	3.6	11.4		62	2	0	64	96.9	3.1	8.5	-22.9
Sarasota	111	7	32	150	74.0	26.0	10.9		125	14	6	145	86.2	13.8	10.0	-3.3
Seminole	178	7	5	190	93.7	6.3	9.6		161	7	1	169	95.3	4.7	8.2	-11.1
Sumter	25	0	0	25	100.0	0.0	10.0		17	2	0	19	89.5	10.5	7.5	-24.0
Suwannee	32	0	0	32	100.0	0.0	12.3		37	2	0	39	94.9	5.1	14.6	21.9
Taylor	18	0	0	18	100.0	0.0	9.4		20	2	0	22	90.9	9.1	11.7	22.2
Union	18	0	0	18	100.0	0.0	22.2		18	0	0	18	100.0	0.0	22.2	0.0
Volusia	207	27	3	237	87.3	12.7	11.7		234	10	0	244	95.9	4.1	11.5	3.0
Wakulla	17	0	0	17	100.0	0.0	10.6		13	2	0	15	86.7	13.3	9.9	-11.8
Walton	14	4	1	19	73.7	26.3	8.6		23	2	1	26	88.5	11.5	11.5	36.8
Washington	18	0	0	18	100.0	0.0	7.8		3	4	0	7	42.9	57.1	3.0	-61.1
State Totals	6,566	862	493	7,921	82.9	17.1	9.2		6,955	569	469	7,993	87.0	13.0	9.0	0.9

\*Dade categorizes as "not certified" all new hires in the Beginning Teacher Program and all those whose applications for certification are still pending. Therefore, the percentage shown for out-of-field teachers in Dade is much higher than for other districts.

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Table A8  
Number of Teachers Teaching Out of Field\*

Subject Fields	Fall 1984 Number of FTE Teachers			Fall 1985 Number of FTE Teachers		
	1 Total	2 Teaching Out of Field	3 Percentage 2/1	4 Total	5 Teaching Out of Field	6 Percentage 5/4
Elem. Educ.	28,811	286	1.0	28,661	341	1.2
Eng./Lang. Arts	9,179	594	6.5	9,489	501	5.3
Math	5,805	405	7.0	6,334	472	7.4
Science	5,209	475	9.1	6,803	562	8.3
Soc. Stud.	4,736	377	8.0	5,070	337	6.6
For. Lang.	1,666	114	6.8	2,147	112	5.2
Health/PE	5,005	287	5.7	5,773	183	3.2
Art	1,615	57	3.5	2,245	62	2.8
Music	2,199	34	1.6	3,121	31	1.0
Intens. Eng/ESOL	578	61	10.6	624	66	10.5
<u>Tot. Basic</u>	64,803	2,690	4.2	70,266	2,666	3.8
Ment. Handi.	1,727	74	4.3	1,654	53	3.2
Occ/Phy. Ther.	173	0	0.0	196	1	0.5
Phy. Imp.	190	8	4.2	181	15	8.3
Speech Ther.	1,374	14	1.0	1,527	18	1.2
Hear/Visual	383	2	0.5	407	4	1.0
SLD	2,294	106	4.6	2,121	176	8.3
Emot. Handi.	1,345	210	15.6	1,197	239	20.0
Gifted	1,099	267	24.3	1,232	219	17.8
Hosp./Home	280	2	0.7	316	2	0.6
Var. Excep.	1,823	68	3.7	2,228	162	7.3
<u>Tot. Excep.</u>	10,689	751	7.0	11,059	889	8.0
Agri.	486	17	3.6	390	7	1.8
Bus.	2,316	89	3.8	1,778	51	2.9
Dist.	339	12	3.4	249	14	5.7
Health	207	8	3.9	135	2	1.3
Pub. Serv.	55	1	1.1	34	4	10.7
Home Econ.	1,428	48	3.4	1,249	32	2.5
Trades/Ind.	1,582	40	2.5	1,032	39	3.8
Ind. Arts	1,148	67	5.9	1,203	54	4.5
<u>Tot. Voc.</u>	7,562	282	3.7	6,069	203	3.3
<u>Total</u>	83,054	3,723	4.5	87,395	3,759	4.3

\*Source: For basic and vocational programs, the Course Code Data File. For exceptional programs, the Annual Data Report of the Bureau of Education for Exceptional Students. Percentages should not be compared for 1984 and 1985 without reference to the body of the report, pages 15-17.

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Table A9  
Estimated Number of Graduates  
From Teacher Education Programs\*  
Survey Completed Fall 1985

Programs	1 1984-85 Projected**	2 1984-85 Actual	3 1985-86 Projected	4 1986-87 Projected	5 1987-88 Projected
Elem. Educ.	1,263	1,373	1,395	1,515	1,608
Eng./Lang. Arts	231	228	262	265	282
Math	114	107	154	173	187
Science	70	68	103	122	141
Soc. Stud.	151	132	153	156	163
For. Lang.	37	20	20	26	29
Health/PE	310	307	286	286	308
Art	65	55	62	60	66
Music	123	99	112	111	119
Intens. Eng/ESOL	4	6	8	18	21
<u>Tot. Basic</u>	<u>2,367</u>	<u>2,393</u>	<u>2,554</u>	<u>2,731</u>	<u>2,923</u>
Hent. Handi.	169	117	117	132	146
Phy. Imp.	0	2	2	4	7
Speech Ther.	111	84	84	78	78
Hear/Visual	27	30	31	36	37
SLD	228	193	212	207	227
Emot. Handi.	103	92	122	125	148
Gifted	15	10	21	21	21
Hosp./Home	3	3	2	2	2
Var. Excep.	14	22	20	17	16
<u>Tot. Excep.</u>	<u>670</u>	<u>552</u>	<u>611</u>	<u>623</u>	<u>683</u>
Agri.	14	13	13	13	13
Bus.	45	48	63	54	56
Dist.	13	16	15	13	12
Health	8	7	8	9	9
Home Econ.	14	15	21	16	17
Trades/Ind.	45	46	54	59	60
Ind. Arts	10	7	5	8	10
<u>Tot. Voc.</u>	<u>149</u>	<u>152</u>	<u>179</u>	<u>172</u>	<u>177</u>
<u>Total</u>	<u>3,186</u>	<u>3,097</u>	<u>3,344</u>	<u>3,526</u>	<u>3,783</u>

\*Based on a survey of deans of 25 Florida colleges and departments of education.

\*\*Number of graduates for 1984-85 projected in the 1984 survey.

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Table A10  
Number of Graduates  
Teacher Education Programs  
Compared to Projected

Programs	1982-83			1983-84			1984-85		
	Proj.	Actual	Percent (2/1)	Proj.	Actual	Percent (2/1)	Proj.	Actual	Percent (2/1)
Elem. Educ.	1,183	1,296	109.6	1,172	1,314	112.1	1,263	1,373	108.7
Eng./Lang. Arts	209	248	118.4	244	248	101.6	231	228	98.7
Math	65	89	136.9	128	83	64.8	114	107	94.3
Science	74	83	111.5	108	66	60.9	70	68	96.4
Soc. Stud.	135	107	78.9	133	140	105.3	151	132	87.4
For. Lang.	20	26	130.0	29	27	93.1	37	20	54.1
Health/PE	381	373	97.9	359	326	90.8	310	307	99.0
Art	73	69	94.5	60	68	113.3	65	55	84.6
Music	104	87	83.7	102	99	97.1	123	99	80.5
Intens. Eng/ESOL	1	2	200.0	7	1	14.3	4	6	150.0
<u>Tot. Basic</u>	2,245	2,379	105.9	2,341	2,371	101.3	2,367	2,393	101.1
Ment. Handi.	115	142	123.8	167	172	103.1	169	117	69.0
Phy. Imp.	6	4	66.7	4	0	0.0	0	2	0.0
Speech Ther.	0	123	0.0	88	107	121.6	111	84	75.7
Hear/Visual	22	30	136.4	33	28	84.6	27	30	109.3
SLD	218	191	87.5	162	222	137.3	228	193	84.5
Emot. Handi.	119	114	95.5	107	98	91.6	103	92	89.0
Gifted	0	1	0.0	2	15	750.0	15	10	66.7
Hosp./Home	0	0	0.0	0	3	0.0	3	3	100.0
Var. Excep.	40	20	49.6	15	13	85.6	14	22	157.8
<u>Tot. Excep.</u>	527	624	96.3	577	657	114.0	670	552	82.3
Agri.	20	20	100.0	16	12	75.0	14	13	92.9
Bus.	59	69	116.9	63	43	68.3	45	48	106.7
Dist.	18	10	55.6	8	11	137.5	13	16	123.1
Health	0	8	0.0	8	10	125.0	8	7	87.5
Home Econ.	17	36	211.8	44	17	38.6	14	15	107.1
Trades/Ind.	32	32	100.0	46	60	130.4	45	46	102.2
Ind. Arts	4	17	425.0	16	14	87.5	10	7	70.0
<u>Tot. Voc.</u>	150	192	128.0	201	167	83.1	149	152	102.0
<u>Total</u>	2,915	3,195	102.8	3,119	3,195	102.4	3,186	3,097	97.2

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Table A11  
Number of Graduates  
Teacher Education Programs  
1981-82 - 1987-88

Programs	A	C	T	U	A	L*	Percent Change 1981-82 to 1984-85	P	R	O	J	E	C	T	E	D	Percent Change 1984-85 to 1987-88
	1981-82	1982-83	1983-84	1984-85	1984-85	1984-85	1985-86	1986-87	1987-88	1987-88							
Elem. Educ.	1,232	1,296	1,314	1,373	11.4	1,395	1,515	1,608	17.1								
Eng./Lang. Arts	180	248	248	228	26.4	262	265	282	24.0								
Math	52	89	83	107	105.8	154	173	187	74.3								
Science	35	83	66	68	92.9	103	122	141	108.9								
Soc. Stud.	117	107	140	132	12.4	153	156	163	24.0								
For. Lang.	20	26	27	20	0.0	20	26	29	45.0								
Health/PE	420	373	326	307	-26.9	286	286	308	0.3								
Art	66	69	68	55	-16.7	62	60	66	20.0								
Music	107	87	99	99	-7.5	112	111	119	20.2								
Intens. Eng/ESOL	2	2	0	6	200.0	8	18	21	250.0								
<u>Tot. Basic</u>	2,231	2,379	2,370	2,393	7.3	2,554	2,731	2,923	22.1								
Ment. Handi.	106	142	172	117	10.1	117	132	146	25.3								
Phy. Imp.	2	4	0	2	0.0	2	4	7	250.0								
Speech Ther.	NA	123	107	84	-31.7**	84	78	78	-7.1								
Hear/Visual	45	30	28	30	-34.4	31	36	37	25.4								
SLD	224	191	222	193	-13.8	212	207	227	17.6								
Emot. Handi.	120	114	98	92	-23.3	122	125	148	61.4								
Gifted	0	1	15	10	0.0	21	21	21	110.0								
Hosp./Home	0	0	3	3	0.0	2	2	2	-33.3								
Var. Excep.	38	20	13	22	-42.5	20	17	16	-25.2								
<u>Tot. Excep.</u>	535	624	657	552	-12.5***	611	623	683	23.7								
Agri.	20	20	12	13	-35.0	13	13	13	0.0								
Bus.	45	69	43	48	6.7	63	54	56	16.7								
Dist.	16	10	11	16	0.0	15	13	12	-25.0								
Health	0	8	10	7	0.0	8	9	9	28.6								
Home Econ.	21	36	17	15	-28.6	21	16	17	13.3								
Trades/Ind.	37	32	60	46	24.3	54	59	60	30.4								
Ind. Arts	10	17	14	7	-30.0	5	8	10	42.9								
<u>Tot. Voc.</u>	149	192	167	152	2.0	179	172	177	16.4								
<u>Total</u>	2,915	3,195	3,194	3,097	3.4***	3,344	3,526	3,783	22.2								

\*Numbers for prior years may not agree with earlier reports because of subsequent changes made by the colleges and universities.

\*\*Percentage change from 1982-83 to 1984-85.

\*\*\*Does not include Speech Therapy.

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Table A12  
Newly Certified Teachers\*

Subject Fields	Number Certified 1985-86	Number as a Percentage of All Fields	Number New Teachers Needed by School Districts Fall 1985**	Number as a Percentage of All Fields
Elem. Educ.	3,365	40.9	1,952	30.4
Eng./Lang. Arts	710	8.6	718	11.2
Math	375	4.6	456	7.1
Science	711	8.6	486	7.6
Soc. Stud.	245	3.0	359	5.6
For. Lang.	320	3.9	203	3.2
Health/PE	501	6.1	258	4.0
Art	199	2.4	152	2.4
Music	223	2.7	202	3.1
Computer	0	0.0	34	0.5
Intens. Eng/ESOL	0	0.0	51	0.8
<u>Tot. Basic</u>	<u>6,640</u>	<u>80.8</u>	<u>4,869</u>	<u>75.9</u>
Ment. Handi.	302	3.7	193	3.0
Occ/Phy. Ther.	0	0.0	23	0.4
Phy. Imp.	18	0.2	28	0.4
Speech Ther.	208	2.5	171	2.7
Hear/Visual	81	1.0	42	0.6
SLD	324	3.9	272	4.2
Emot. Handi.	165	2.0	259	4.0
Gifted	25	0.3	67	1.1
Hosp./Home	0	0.0	10	0.2
Var. Excep.	116	1.4	150	2.3
<u>Tot. Excep.</u>	<u>1,237</u>	<u>15.0</u>	<u>1,217</u>	<u>19.0</u>
Agri.	28	0.3	36	0.6
Bus.	139	1.7	53	0.8
Dist.	0	0.0	16	0.2
Health	0	0.0	11	0.2
Pub. Serv.	0	0.0	1	0.0
Home Econ.	115	1.4	65	1.0
Trades/Ind.	0	0.0	69	1.1
Ind. Arts	61	0.7	80	1.3
<u>Tot. Voc.</u>	<u>343</u>	<u>4.2</u>	<u>331</u>	<u>5.2</u>
<u>Total</u>	<u>8,220</u>	<u>100.0</u>	<u>6,418</u>	<u>100.0</u>

\*First-time certificates issued during 1985 - 86. Source: Active Certificate File.  
Since the Office of Teacher Certification has been working to process a large backlog of applications, the numbers in this column represent more than one year of applications. See text.

\*\*Taken from Column 4, Table A2.

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Table A13  
Percentage of New Certificates Issued  
To Graduates of Florida Colleges and Universities

Subject Fields	1983-84	1984-85	1985-86
Elem. Educ.	38.8	34.6	39.9
Eng./Lang. Arts	27.9	22.8	24.1
Math	31.1	28.3	32.4
Science	35.2	23.4	33.4
Soc. Stud.	30.4	19.4	28.9
For. Lang.	18.0	17.3	16.4
Health/PE	35.6	31.7	30.9
Art	32.2	24.3	30.1
Music	36.1	27.5	32.6
Intens. Eng/ESOL	100.0	0.0	100.0
<u>Tot. Basic</u>	35.2	29.2	34.4
Ment. Handi.	44.7	30.4	35.5
Phy. Imp.	0.0	0.0	42.9
Speech Ther.	26.7	10.0	23.8
Hear/Visual	48.3	28.6	28.6
SLD	83.1	51.7	57.9
Emot. Handi.	76.5	67.4	63.5
Gifted	0.0	20.0	13.3
Var. Excep.	2.4	32.1	32.8
<u>Tot. Excep.</u>	46.8	37.4	42.1
Agri.	28.6	75.0	52.6
Bus.	36.1	29.4	34.3
Health	58.6	21.9	100.0
Home Econ.	25.0	25.8	20.7
Ind. Arts	9.6	0.0	2.9
<u>Tot. Voc.</u>	29.9	25.8	26.0
<u>Total</u>	36.4	30.1	35.1
Percentage of Certificates with college/univ. coded.*	67.9	36.9	54.6

\*A number of records in the Active Certificate File do not have college/university coded. The percentage so coded has decreased as the backlog of applications has increased. The Office of Teacher Certification is working to see that all records are properly coded in the future.

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Table A14  
Number of First-Year Teachers\*  
By School District  
Fall 1985

School District	Teaching First Year	Teaching First Year Fla. Trained	Percentage	School District	Teaching First Year	Teaching First Year Fla. Trained	Percentage
Alachua	69	54	78.3	Leon	54	44	81.5
Baker	20	16	80.0	Levy	14	10	71.4
Bay	27	22	81.5	Liberty	2	2	100.0
Bradford	15	11	73.3	Madison	18	12	66.7
Brevard	196	75	38.3	Manatee	54	34	63.0
Broward	282	135	47.9	Marion	86	54	62.8
Calhoun	13	9	69.2	Martin	30	10	33.3
Charlotte	21	9	42.9	Monroe	22	12	54.5
Citrus	30	16	53.3	Nassau	26	15	57.7
Clay	82	46	56.1	Ocala	37	16	43.2
Collier	27	10	37.0	Okeechobee	19	6	31.6
Columbia	14	12	85.7	Orange	257	158	61.5
Dade	702	421	60.0	Osceola	39	18	46.2
Desoto	12	8	66.7	Palm Beach	445	159	35.7
Dixie	9	7	77.8	Pasco	81	52	64.2
Duval	278	165	59.4	Pinellas	228	146	64.9
Escambia	132	57	43.2	Polk	148	100	67.6
Flagler	14	4	28.6	Putnam	31	21	67.7
Franklin	9	8	88.9	St. Johns	41	22	53.7
Gadsden	21	12	57.1	St. Lucie	127	15	11.8
Gilchrist	4	4	100.0	Santa Rosa	67	30	44.8
Glades	3	0	0.0	Sarasota	35	17	48.6
Gulf	9	5	55.6	Seminole	72	51	70.8
Hamilton	9	6	66.7	Sumter	11	7	63.6
Hardee	44	7	15.9	Suwannee	21	13	61.9
Hendry	14	7	50.0	Taylor	16	13	81.3
Hernando	46	28	60.9	Union	13	13	100.0
Highlands	15	8	53.3	Volusia	108	73	67.6
Hillsborough	409	271	66.3	Wakulla	5	4	80.0
Holmes	0	0	0.0	Walton	11	8	72.7
Indian River	25	13	52.0	Washington	3	0	0.0
Jackson	18	8	44.4	<u>State Totals</u>	4,819	2,665	55.3
Jefferson	5	4	80.0	*Source: Fall School Survey.			SP/MIS 11/05/86
Lafayette	3	1	33.3				
Lake	54	41	75.9				
Lee	67	28	41.8				

Table A15  
Projected Number of Teachers Needed  
Through 2000-01

Programs	Total Teachers		Additional Teachers Needed *					
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1995-96	2000-01
Elem. Educ.	31,464	3,743	3,763	4,026	3,628	3,960	3,014	2,776
Eng./Lang. Arts	9,077	793	820	827	732	826	1,380	1,272
Math	6,075	491	510	511	447	509	913	835
Science	6,231	500	520	519	454	518	961	881
Soc. Stud.	4,863	362	377	375	324	373	721	654
For. Lang.	2,052	223	230	235	213	235	335	317
Health/PE	5,643	422	431	445	378	435	599	522
Art	2,239	243	248	257	232	256	306	286
Music	3,128	298	304	317	280	312	367	333
Computer	615	38	39	39	32	38	75	66
Intens. Eng./ESOL	638	72	73	76	69	76	81	76
<u>Tot. Basic</u>	<u>72,025</u>	<u>7,185</u>	<u>7,315</u>	<u>7,627</u>	<u>6,788</u>	<u>7,538</u>	<u>8,753</u>	<u>8,018</u>
Mont. Handi.	1,599	221	226	233	217	235	290	283
Occ/Phy. Ther.	189	27	28	29	27	29	30	29
Phy. Imp.	175	28	29	30	28	30	35	35
Speech Ther.	1,476	241	245	257	241	258	248	246
Hear/Visual	394	61	62	65	61	65	72	71
SLD	2,050	348	356	368	349	373	437	436
Emot. Handi.	1,156	292	299	309	301	316	367	380
Gifted	1,191	113	114	120	106	118	128	115
Hosp./Home	305	16	16	16	13	15	26	20
Var. Excep.	2,153	201	206	212	188	210	280	257
<u>Tot. Excep.</u>	<u>10,688</u>	<u>1,547</u>	<u>1,580</u>	<u>1,640</u>	<u>1,530</u>	<u>1,650</u>	<u>1,912</u>	<u>1,871</u>
Agri.	402	37	38	38	34	39	68	64
Bus.	1,834	58	62	58	37	54	172	136
Nst.	257	14	15	15	12	15	32	28
Health	139	10	11	10	9	10	20	18
Pub. Serv.	35	2	2	2	1	2	4	3
Home Econ.	1,288	65	68	67	52	65	152	130
Trades/Ind.	1,065	69	72	71	59	70	144	128
Ind. Arts	1,241	81	84	83	70	82	169	150
<u>Tot. Voc.</u>	<u>6,260</u>	<u>335</u>	<u>351</u>	<u>345</u>	<u>275</u>	<u>336</u>	<u>763</u>	<u>659</u>
<u>Total</u>	<u>88,973</u>	<u>9,068</u>	<u>9,247</u>	<u>9,611</u>	<u>8,593</u>	<u>9,524</u>	<u>11,427</u>	<u>10,547</u>

\*Additional Teachers Needed is the total number of teachers in the prior years, minus attrition, plus the number needed to keep up with projected number of students. (See Appendix Tables A13-A14.) Includes vacancies due to interdistrict moves as well as new teachers needed.

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Table A16  
Number of Teachers Expected to Terminate  
and Projected Need  
Through 1988-89\*

Programs	1985-86	1986-87				1987-88				1988-89			
	Total	TERM	GRO	NEED	TOT	TERM	GRO	NEED	TOT	TERM	GRO	NEED	TOT
Elem. Educ.	31,464	2,035	1,708	3,743	33,173	2,093	1,670	3,763	34,843	2,150	1,876	4,026	36,719
Eng./Lang. Arts	9,077	715	74	793	9,151	739	82	820	9,232	759	68	827	9,301
Math	6,075	465	31	491	6,106	473	37	510	6,142	486	24	511	6,167
Science	6,231	483	18	500	6,249	496	24	520	6,273	510	9	519	6,282
Soc. Stud.	4,863	351	10	362	4,873	361	16	377	4,889	371	3	375	4,892
For. Lang.	2,052	191	32	223	2,084	196	33	230	2,118	202	33	235	2,151
Health/PE	5,643	295	127	422	5,769	303	128	431	5,897	312	133	445	6,030
Art	2,239	179	63	243	2,303	185	63	248	2,366	190	68	257	2,434
Music	3,128	206	93	298	3,221	211	92	304	3,313	217	99	317	3,413
Computer	615	34	4	38	619	35	5	39	623	35	4	39	627
Intens. Eng/ESOL	638	49	22	72	661	51	22	73	683	52	24	76	707
<u>Tot. Basic</u>	<u>72,025</u>	<u>5,002</u>	<u>2,183</u>	<u>7,185</u>	<u>74,208</u>	<u>5,143</u>	<u>2,172</u>	<u>7,315</u>	<u>76,380</u>	<u>5,285</u>	<u>2,342</u>	<u>7,627</u>	<u>78,722</u>
Hent. Handl.	1,599	181	40	221	1,638	186	40	226	1,678	191	42	233	1,720
Occ/Phy. Ther.	189	200	8	27	197	20	7	28	204	21	8	29	213
Phy. Imp.	175	203	5	28	180	24	5	29	185	24	5	30	190
Speech Ther.	1,476	172	69	241	1,545	177	68	245	1,613	182	75	257	1,688
Hear/Visual	394	48	13	61	408	49	13	62	421	50	15	65	436
SLD	2,050	288	59	348	2,109	297	59	356	2,168	305	63	368	2,232
Emot. Handl.	1,156	288	34	292	1,190	265	34	299	1,224	273	37	309	1,261
Gifted	1,191	72	41	113	1,231	74	40	114	1,272	76	44	120	1,315
Hosp./Home	305	100	6	16	311	10	6	16	317	10	6	16	323
Var. Excep.	2,153	153	48	201	2,201	158	48	206	2,250	162	51	212	2,300
<u>Tot. Excep.</u>	<u>10,688</u>	<u>1,225</u>	<u>323</u>	<u>1,547</u>	<u>11,011</u>	<u>1,259</u>	<u>321</u>	<u>1,580</u>	<u>11,332</u>	<u>1,294</u>	<u>346</u>	<u>1,640</u>	<u>11,678</u>
Agri.	402	36	1	37	403	37	1	38	404	38	0	38	404
Bus.	1,834	54	4	58	1,838	56	6	62	1,844	57	1	58	1,845
Dist.	257	14	1	14	257	14	1	15	258	15	0	15	258
Health	139	10	0	10	139	10	0	11	139	10	0	10	140
Pub. Serv.	35	2	0	2	35	2	0	2	35	2	0	2	35
Home Econ.	1,288	62	3	65	1,291	64	4	68	1,295	66	1	67	1,296
Trades/Ind.	1,065	66	2	69	1,067	68	3	72	1,071	70	1	71	1,071
Ind. Arts	1,241	78	3	81	1,244	80	4	84	1,248	82	1	83	1,248
<u>Tot. Voc.</u>	<u>6,260</u>	<u>522</u>	<u>14</u>	<u>335</u>	<u>6,274</u>	<u>331</u>	<u>20</u>	<u>351</u>	<u>6,294</u>	<u>340</u>	<u>4</u>	<u>345</u>	<u>6,299</u>
<u>Total</u>	<u>88,973</u>	<u>6,543</u>	<u>2,519</u>	<u>9,068</u>	<u>91,492</u>	<u>6,734</u>	<u>2,513</u>	<u>9,247</u>	<u>94,005</u>	<u>6,919</u>	<u>2,693</u>	<u>9,611</u>	<u>96,698</u>

TERM=Estimated Number of Teachers Needed Due to Termination  
 GRO=Teachers Needed Due to Enrollment Growth  
 0 (negative number means fewer teachers needed)  
 NEED=Number of Replacement Teachers Needed (Term+Gro)  
 TOT=Projected Number of Teachers Needed  
 (Total for prior year + Need)

\*Projections based on projected enrollments, with grades K-6 and grades 7-12 projected separately. Exceptional Projections reflect expected program growth through 1986-87.



Table A17  
Number of Teachers Expected to Terminate  
and Projected Need  
From 1989-90 to 2000-01\*

Programs	TERM	1989-90			TERM	1990-91			TERM	1995-96**			TERM	2000-01**		
		GRO	NEED	TOT		GRO	NEED	TOT		GRO	NEED	TOT		GRO	NEED	TOT
Elem. Educ.	2,212	1,416	3,628	38,135	2,246	1,714	3,960	39,849	2,581	433	3,014	44,196	2,867	-91	2,776	44,131
Eng./Lang. Arts	781	-49	732	9,251	793	33	826	9,284	911	469	1,380	11,117	1,012	260	1,272	13,070
Math	500	-54	447	6,113	508	1	509	6,114	584	329	913	7,367	649	167	835	8,763
Science	524	-70	454	6,212	532	-14	518	6,198	612	349	961	7,502	680	201	881	8,999
Soc. Stud.	382	-58	324	4,834	388	-15	373	4,819	446	275	721	5,842	495	159	654	7,026
For. Lang.	207	6	213	2,156	211	25	235	2,181	242	93	335	2,574	269	48	317	2,942
Health/PE	321	57	378	6,088	325	109	435	6,197	374	225	599	7,225	416	107	522	8,060
Art	195	37	232	2,471	198	58	256	2,529	228	79	306	2,919	253	33	286	3,188
Music	223	56	280	3,469	227	85	312	3,554	261	106	367	4,093	290	44	333	4,450
Computer	37	-4	32	623	37	1	38	624	43	32	75	749	47	18	66	886
Intens. Eng/ESOL	53	15	69	723	54	21	76	744	62	19	81	849	69	6	76	905
<u>Tot. Basic</u>	<u>5,436</u>	<u>1,352</u>	<u>6,788</u>	<u>80,074</u>	<u>5,519</u>	<u>2,019</u>	<u>7,538</u>	<u>82,093</u>	<u>6,343</u>	<u>2,409</u>	<u>8,753</u>	<u>94,433</u>	<u>7,046</u>	<u>972</u>	<u>8,018</u>	<u>102,421</u>
Ment. Handi.	197	20	217	1,740	200	35	235	1,776	230	61	290	2,062	255	28	283	2,280
Coc./Phy. Ther.	21	5	27	218	22	7	29	225	25	5	30	255	28	1	29	268
Phy. Imp.	25	3	28	193	25	5	30	198	29	6	35	228	32	3	35	249
Speech Ther.	187	51	241	1,742	190	68	258	1,810	218	29	248	2,030	242	3	246	2,079
Hear/Visual	52	9	61	445	52	13	65	458	60	12	72	523	67	4	71	559
SLD	313	35	349	2,267	318	54	373	2,321	366	71	437	2,676	406	30	436	2,917
Emot. Handi.	280	21	301	1,282	285	32	316	1,313	327	39	367	1,512	364	16	380	1,644
Gifted	78	27	106	1,343	80	38	118	1,381	91	36	128	1,579	102	13	115	1,689
Hosp./Home	11	2	13	325	11	5	15	329	12	13	26	387	14	7	20	437
Var. Excep.	167	22	188	2,322	169	41	210	2,363	194	86	280	2,756	216	41	257	3,076
<u>Tot. Excep.</u>	<u>1,331</u>	<u>199</u>	<u>1,530</u>	<u>11,877</u>	<u>1,351</u>	<u>298</u>	<u>1,650</u>	<u>12,175</u>	<u>1,553</u>	<u>359</u>	<u>1,912</u>	<u>14,008</u>	<u>1,726</u>	<u>145</u>	<u>1,871</u>	<u>15,200</u>
Agri.	39	-5	34	399	40	-1	39	398	46	23	68	483	51	13	64	581
Bus.	59	-22	37	1,823	60	-6	54	1,818	69	104	172	2,203	76	60	136	2,650
Dist.	15	-3	12	255	15	-1	15	255	18	15	32	309	20	8	28	371
Health	11	-2	9	138	11	0	10	137	12	8	20	167	14	5	18	200
Pub. Serv.	2	0	1	35	2	0	2	35	2	2	4	42	2	1	3	50
Home Econ.	68	-15	52	1,281	69	-4	65	1,277	79	73	152	1,548	88	42	130	1,861
Trades/Ind.	72	-13	59	1,059	73	-3	70	1,055	84	60	144	1,279	93	35	128	1,539
Ind. Arts	85	-15	70	1,233	86	-4	82	1,230	99	70	169	1,491	110	41	150	1,793
<u>Tot. Voc.</u>	<u>350</u>	<u>-75</u>	<u>275</u>	<u>6,223</u>	<u>355</u>	<u>-19</u>	<u>336</u>	<u>6,204</u>	<u>408</u>	<u>354</u>	<u>763</u>	<u>7,521</u>	<u>454</u>	<u>205</u>	<u>659</u>	<u>9,046</u>
<u>Total</u>	<u>7,117</u>	<u>1,476</u>	<u>8,593</u>	<u>98,174</u>	<u>7,226</u>	<u>2,298</u>	<u>9,524</u>	<u>100,473</u>	<u>8,305</u>	<u>3,122</u>	<u>11,427</u>	<u>115,962</u>	<u>9,225</u>	<u>1,322</u>	<u>10,547</u>	<u>126,666</u>

TERM=Estimated Number of Teachers Needed Due to Termination

GRO=Teachers Needed Due to Enrollment Growth

(negative number means fewer teachers needed)

NEED=Number of Replacement Teachers Needed (Term+Gro)

TOT=Projected number of Teachers Needed (Total for prior year + Need)

\*Projections based on projected enrollments, with grades K-6 and grades 7-12 projected separately.

\*\*Termination and growth shown are from prior year. Intervening years between 1991 to 1995 and 1996 to 2000 are not shown.

Table A18  
Demand for Teachers Compared to Teacher Education Graduates  
and Projected Need  
Through 1988-89\*

Programs	Additional Teachers Needed*			Projected Teacher Graduates**			Ratio		
	1	2	3	4	5	6	7	8	9
	1986-87	1987-88	1988-89	1985-86	1986-87	1987-88	4/1	5/2	6/3
Elem. Educ.	3,743	3,763	4,026	1,395	1,515	1,608	0.373	0.403	0.399
Eng./Lang. Arts	793	820	827	262	265	282	0.330	0.323	0.341
Math	491	510	511	154	173	187	0.313	0.338	0.365
Science	500	520	519	103	122	141	0.205	0.234	0.272
Soc. Stud.	362	377	375	153	156	163	0.423	0.412	0.435
For. Lang.	223	230	235	20	26	29	0.090	0.113	0.124
Health/PE	422	431	445	286	286	308	0.677	0.664	0.692
Art	243	248	257	62	60	66	0.255	0.242	0.257
Music	298	304	317	112	111	119	0.375	0.365	0.376
Computer	38	39	39	0	0	0	0.000	0.000	0.000
Intens. Eng/ESOL	72	73	76	8	18	21	0.112	0.247	0.276
<u>Tot. Basic</u>	7,185	7,315	7,627	2,554	2,731	2,923	0.355	0.373	0.383
Ment. Handi.	221	226	233	117	132	146	0.531	0.585	0.626
Occ/Phy. Ther.	27	28	29	0	0	0	0.000	0.000	0.000
Phy. Imp.	28	29	30	2	4	7	0.072	0.140	0.237
Speech Ther.	241	245	257	84	78	78	0.348	0.319	0.303
Hear/Visual	61	62	65	31	36	37	0.508	0.578	0.571
SLD	348	356	368	212	207	227	0.611	0.583	0.617
Emot. Handi.	292	299	309	122	125	148	0.417	0.419	0.480
Gifted	113	114	120	21	21	21	0.186	0.184	0.175
Hosp./Home	16	16	16	2	2	2	0.129	0.126	0.123
Var. Excep.	201	206	212	20	17	16	0.099	0.083	0.077
<u>Tot. Excep.</u>	1,547	1,580	1,640	611	623	683	0.395	0.394	0.416
Agri.	37	38	38	13	13	13	0.352	0.339	0.339
Bus.	58	62	58	63	54	56	1.086	0.878	0.959
Dist.	14	15	15	15	13	12	1.036	0.858	0.806
Health	10	11	10	8	9	9	0.790	0.853	0.858
Pub. Serv.	2	2	2	0	0	0	0.000	0.000	0.000
Home Econ.	65	68	67	21	16	17	0.323	0.235	0.255
Trades/Ind.	69	72	71	54	59	60	0.787	0.823	0.847
Ind. Arts	81	84	83	5	8	10	0.062	0.095	0.120
<u>Tot. Voc.</u>	335	351	345	179	172	177	0.534	0.490	0.514
<u>Total</u>	9,068	9,247	9,611	3,344	3,526	3,783	0.369	0.381	0.394

\*Taken from Table A15.

\*\*Taken from Table A12.

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Table A19  
Number of New Teachers Needed

Programs	From Vacancy Survey Fall 1985			Estimated New Teachers Needed 1987-88	
	1 Total Number of Vacancies	2 New Teachers Needed*	3 New Teachers as a Percentage of Vacancies (2/1)	4 Number Teachers Needed Excluding Current Out of Field	5 Estimated Number New Teachers Needed (3x4)
Elem. Educ.	2,484	1,952	78.6	3,763	2,958
Eng./Lang. Arts	877	718	81.9	820	672
Math	562	456	81.2	510	414
Science	589	486	82.5	520	429
Soc. Stud.	429	359	83.8	377	316
For. Lang.	233	203	87.1	230	200
Health/PE	360	256	71.7	431	309
Art	219	152	69.3	248	172
Music	251	202	80.4	304	244
Computer	41	34	83.5	39	33
Intens. Eng/ESOL	60	51	85.4	73	62
<u>Tot. Basic</u>	6,105	4,869	79.8	7,315	5,835
Ment. Handi.	221	193	87.5	226	198
Occ/Phy. Ther.	24	23	95.8	28	26
Phy. Imp.	28	28	100.0	29	29
Speech Ther.	210	171	81.6	245	200
Hear/Visual	58	42	71.9	62	45
SLD	352	272	77.2	356	274
Emot. Handi.	315	259	82.1	299	246
Gifted	88	67	76.7	114	88
Hosp./Home	12	10	83.3	16	13
Var. Excep.	187	150	80.1	206	165
<u>Tot. Excep.</u>	1,495	1,217	81.4	1,580	1,286
Agri.	44	36	80.8	38	31
Bus.	66	53	79.8	62	49
Dist.	17	16	93.5	15	14
Health	12	11	91.7	11	10
Pub. Serv.	2	1	50.0	2	1
Home Econ.	76	65	85.4	68	58
Trades/Ind.	81	69	85.8	72	61
Ind. Arts	95	80	84.6	84	71
<u>Tot. Voc.</u>	393	331	84.2	351	296
<u>Total</u>	7,993	6,418	80.3	9,247	7,425

\*Excludes those vacancies filled by teachers who taught the prior year in another Florida school district.

Table A20  
Projected Teacher Supply and Demand  
1987-88

Programs	1	2	3	4	Ratio of Florida Education Graduates to Need		
	Total Number Additional Teachers Needed	Number Teachers Needed Excluding Current Out of Field	Estimated Number New Teachers Needed*	Proj. Florida Education Graduates 1986-87	(4/1)	(4/2)	(4/3)
Elem. Educ.	4,104	3,763	2,958	1,515	0.37	0.40	0.51
Eng./Lang. Arts	1,322	820	672	265	0.20	0.32	0.39
Math	982	510	414	173	0.18	0.34	0.42
Science	1,082	520	429	122	0.11	0.23	0.28
Soc. Stud.	714	377	316	156	0.22	0.41	0.49
For. Lang.	341	230	200	26	0.08	0.11	0.13
Health/PE	614	431	309	286	0.47	0.66	0.93
Art	310	248	172	60	0.19	0.24	0.35
Music	335	304	244	111	0.33	0.37	0.45
Computer	58	39	33	0	0.00	0.00	0.00
Intens. Eng/ESOL	138	73	62	18	0.13	0.25	0.29
<u>Tot. Basic</u>	10,000	7,315	5,835	2,731	0.27	0.37	0.47
Ment. Handi.	279	226	198	132	0.47	0.58	0.67
Occ/Phy. Ther.	29	28	26	0	0.00	0.00	0.00
Phy. Imp.	44	29	29	4	0.09	0.14	0.14
Speech Ther.	263	245	200	78	0.30	0.32	0.39
Hear/Visual	66	62	45	36	0.54	0.58	0.80
SLD	532	356	274	207	0.39	0.58	0.76
Emot. Handi.	539	299	246	125	0.23	0.42	0.51
Gifted	333	114	88	21	0.06	0.18	0.24
Hosp./Home	18	16	13	2	0.11	0.13	0.15
Var. Excep.	368	206	165	17	0.05	0.08	0.10
<u>Tot. Excep.</u>	2,470	1,580	1,286	623	0.25	0.39	0.48
Agri.	46	38	31	13	0.29	0.34	0.42
Bus.	112	62	49	54	0.48	0.88	1.10
Dist.	29	15	14	13	0.44	0.86	0.92
Health	12	11	10	9	0.73	0.85	0.93
Pub. Serv.	5	2	1	0	0.00	0.00	0.00
Home Econ.	100	68	58	16	0.16	0.23	0.27
Trades/Ind.	111	72	61	59	0.53	0.82	0.96
Ind. Arts	138	84	71	8	0.06	0.10	0.11
<u>Tot. Voc.</u>	554	351	296	172	0.31	0.49	0.58
<u>Total</u>	13,024	9,247	7,425	3,526	0.27	0.38	0.47

\*Excludes those vacancies to be filled by teachers from other Florida school districts.

**APPENDIX B**  
**STATUTES IMPLEMENTING MEASURES FOR ATTRACTING TEACHERS**

- B1: Teacher Financial Aid Programs**
- B2: Alternative Certification Program**
- B3: Teacher Recruitment Center**

B1- Teacher Financial Aid Programs  
Contact Person:  
Dr. Elizabeth Sweeney  
(904) 488-5060 SUNCOM 278-5060

**240.4066 Masters' Fellowship Loan Program for Teachers.—**

(1) For the purpose of attracting and retaining highly qualified postsecondary graduates into public school teaching in Florida, there is hereby created the Masters' Fellowship Loan Program for Teachers. The primary objective of the program shall be to attract liberal arts graduates and science graduates to teaching and to provide an opportunity for midcareer decisions to enter the teaching profession.

(2) Any university in this state may establish a Masters' Program for Teachers where the College of Education and the College of Arts and Sciences shall jointly develop a cooperative program that will allow a liberal arts graduate or a science graduate to receive a master's degree and be certified as a teacher by the Department of Education.

(3) To be eligible, a candidate shall:

(a) Hold a bachelor's degree from any college or university accredited by a Regional Accrediting Association as defined by State Board of Education Rule 6A-4.03;

(b) Have maintained an undergraduate grade point average of at least 3.0 on a 4.0 scale or the equivalent in his major subject area of study and have attained a Graduate Record Examination score of 1000 or above;

(c) Have declared an intention to teach in public schools of Florida for 3 years in a critical teacher shortage location identified by the State Board of Education; and

(d) Be a candidate for admission to a Masters' Program for Teachers based on criteria adopted by the State Board of Education.

(4) Each candidate shall be selected by the Commissioner of Education and awarded a fellowship loan for tuition and fees to cover the costs of two semesters and up to two summer sessions, plus \$6,000 for the Masters' Fellowship Loan Program for Teachers.

(5) After the candidate has successfully completed a master's degree, the Department of Education shall provide temporary certification to the candidate, and, after the candidate has completed a successful first year of teaching in the Beginning Teacher Program, the department shall provide regular certification to the candidate.

(6) Universities shall work with local school districts to develop cooperative agreements which will provide for placement of the candidates upon completion of the Masters' Program for Teachers.

(7) Fellowship recipients shall complete 3 years of public school service within 5 years after graduation from the program. Any person who fails to complete the training program or the required teaching service shall be responsible for repaying the fellowship loan plus interest at prevailing rates. Repayment schedules and applicable interest rates shall be fixed by rules of the State Board of Education.

(8) The State Board of Education shall adopt any rules necessary to implement the program.

History.—s. 16, ch. 85-196.

**240.4068 "Chappie" James Most Promising Teacher Scholarship Program.—**

(1) This act may be cited as the "Chappie" James Most Promising Teacher Scholarship Act."

(2) There is hereby created the "Chappie" James Most Promising Teacher Scholarship Program, which shall offer to a top graduating senior from each public secondary school in the state a full 4-year scholarship to attend a state university, a community college, or an independent institution as defined in s. 240.401(2). To be eligible, a student shall be ranked within the top quartile of the senior class and shall make a written agreement to enter the public teaching profession in Florida for a minimum number of years, at least equal to the number of years of postsecondary instruction received thru the program.

(3) Funds appropriated by the Legislature for the program shall be deposited in the Critical Teacher Shortage Trust Fund. Of such funds, at least one scholarship shall be reserved annually for each public high school. Fifteen percent of scholarships awarded shall be to minority students. Any unexpended funds allocated to the program shall remain in the trust fund and shall be available to be appropriated for use in any of the programs supported by the fund and as otherwise provided for by law.

(4) Three candidates from each public secondary school in the state shall be nominated by the principal and a committee of teachers based on criteria which shall include, but need not be limited to, rank in class, standardized test scores, cumulative grade point average, extracurricular activities, letters of recommendation, and an essay and declaration of intention to teach in a public school in the state. From such nominees, the Commissioner of Education shall select a graduating senior from each high school to receive a scholarship, with priority given to candidates who plan to teach in critical teacher shortage areas identified by the State Board of Education.

(5) Each scholarship shall be limited to \$4,000 per year and shall be subject to annual renewal contingent upon the recipient maintaining full-time enrollment status and a grade point average of at least 3.0 on a 4.0 scale, or the equivalent. No person shall receive a scholarship for more than 4 years. Recipients shall not be eligible to participate in the teacher scholarship loan program under s. 240.4062 or the student loan forgiveness program under s. 231.621.

(6) Any recipient who fails to complete an appropriate program of studies or fails to teach in accordance with the conditions specified in this section shall be responsible for repaying the scholarship amount plus interest at the prevailing rate, and the Department of Education shall take action for repayment in the manner prescribed in s. 240.465 in order to accomplish the intent and purposes of this act.

(7) The State Board of Education shall adopt rules necessary for the implementation of the program. Such rules shall prescribe the prevailing rate of interest as required in subsection (6).

History.—s. 11, ch. 85-196.



**240.4062 Teacher scholarship loan programs.—**

(1) Scholarship loan programs shall be established and implemented for the purpose of attracting capable and promising students to the teaching profession in areas of projected or critical teacher shortage. The State Board of Education shall adopt rules necessary to implement the programs and shall annually identify critical teacher shortage areas, if any.

(2) To be eligible, a candidate shall:

(a) Be a full-time student at the upper division or higher level in a teacher training program approved by the department pursuant to s. 240.529 leading to certification in a critical teacher shortage area.

(b) Have declared his intention to teach in the public schools of this state for 3 years following completion of the requirements.

(c) Have a record of high performance in the area of certification being sought.

(3) A scholarship loan may be awarded for no more than 2 years and may not exceed \$4,000 a year.

(4) A scholarship loan must be paid back within 10 years of completion of a program of studies.

(a) Credit for repayment of a scholarship loan shall be as follows:

1. Twenty-five percent of the loan principal and accrued interest shall be retired after the first year of teaching;

2. One-third of the loan principal and accrued interest shall be retired after the second year of teaching;

3. Fifty percent of the loan principal and accrued interest shall be retired after the third year of teaching; and

4. The remaining loan principal and accrued interest shall be retired after the fourth year of teaching.

However, credit for fifty percent of the loan principal and accrued interest shall be retired after the first year of teaching and the remainder of the principal and accrued interest shall be retired after the second year of teaching if the recipient teaches at a high-density, low-economic urban school or at a low-density, low-economic rural school, as identified by the state board.

(b) Any person who fails to complete an appropriate program of studies or who fails to teach in a public school or developmental research school in this state as specified in this subsection is responsible for repaying the loan plus interest at prevailing rates. Repayment schedules and applicable interest rates shall be determined by rules of the State Board of Education.

(5) For the first 2 years of a program, at least 50 percent of the scholarship loans shall be awarded in the areas of mathematics and science. The remaining funds shall be available for other critical teacher shortage areas.

(6) This section shall be implemented in the 1983-1984 school year and thereafter only to the extent as specifically funded and authorized by law.

History.—ss. 10, 23, ch. 83-327; s. 6, ch. 83-348; s. 56, ch. 84-336.  
cf.—s. 231.62 "Critical teacher shortage area" defined.

**240.4064 Critical teacher shortage tuition reimbursement program.—**

(1) A critical teacher shortage tuition reimbursement program shall be established for the purpose of improving the skills and knowledge of current teachers or persons preparing to teach in critical teacher shortage areas.

(2) The State Board of Education shall adopt rules to implement the critical teacher shortage tuition reimbursement program. Any full-time public school employee or developmental research school employee certified to teach in this state is eligible for the program. For the purposes of this program, tuition reimbursement shall be limited to courses in critical teacher shortage areas as determined by the State Board of Education. Such courses shall be:

(a) Graduate-level courses leading to a master's, specialist, or doctoral degree;

(b) Graduate-level courses leading to a new certification area; or

(c) State-approved undergraduate courses leading to an advanced degree or new certification area.

(3) Participants may receive tuition reimbursement payments for up to 9 semester hours, or the equivalent in quarter hours, per year, at a rate not to exceed \$78 per semester hour, up to a total of 36 semester hours. All tuition reimbursements shall be contingent on passing an approved course with a minimum grade of 3.0 or its equivalent.

(4) For the first 2 years of the program, at least 50 percent of all tuition reimbursements shall be in the areas of mathematics and science. The remaining funds shall be allocated to persons teaching out of field in other critical teacher shortage areas and to persons who teach, or who are expected to teach, at least 50 percent of the day in other critical teacher shortage areas.

(5) This section shall be implemented in the 1983-1984 school year and thereafter only to the extent as specifically funded and authorized by law.

History.—ss. 11, 23, ch. 83-327; s. 6, ch. 83-348  
cf.—s. 231.62 "Critical teacher shortage area" defined

**240.4065 Critical Teacher Shortage Trust Fund.—**

There is created the Critical Teacher Shortage Trust Fund. The Comptroller shall authorize expenditures from this fund upon receipt of vouchers approved by the Department of Education for the critical teacher shortage programs established in s. 231.621, s. 240.4062, or s. 240.4064. All scholarship loan repayments pursuant to s. 240.4062 shall be deposited into the Critical Teacher Shortage Trust Fund. Any remaining balance at the end of any fiscal year shall remain in the fund and be available for the critical teacher shortage programs in future years.

History.—s. 55, ch. 84-336.

**B2- Alternative Certification Program**

**Contact Person:**

Mr. James Parris  
(904) 488-0642  
SUNCOM 278-0642

**231.172 Alternate certification program for secondary school teachers.—**

(1) There is established an experimental alternate certification program for the purpose of attracting arts and science graduates to teach in the secondary schools of this state, particularly in areas of critical shortage.

(2) Certification requirements shall include:

(a) Maintenance of an overall grade point average of 2.75 on a 4.0 scale.

(b) A bachelor's degree from an accredited college or university in an arts and science discipline with a major in the subject area in which the graduate is hired to teach.

(c) A passing score on the Florida Teacher Certification Examination. Effective June 1, 1986, candidates shall be required to receive a passing score on a subject matter component or an equivalent nationally available subject matter examination.

(d) Satisfactory completion of a modified beginning teacher program during the first half of the school year, which program may include a reduced teaching load and the guidance of a master teacher and for which the candidate will receive compensation as a beginning teacher.

(e) Successful completion of the beginning teacher program during the second half of the candidacy year.

(3) Teachers who complete the certification requirements of subsection (2) shall receive a regular certificate to teach in the schools of this state.

(4) The Department of Education, universities, and school districts shall work cooperatively to develop implementation procedures for submission to the State Board of Education in accordance with s. 231.546(1)(e). Each school district shall be encouraged to participate and shall receive, in addition to funds received through the Florida Education Finance Program, state funding for each candidate equivalent to the amount per full-time equivalent student currently allocated to colleges of education for upper division undergraduate teacher education programs.

(5) Evaluative data on program participants shall be collected by the Department of Education and compared to similar data for college of education graduates and arts and science graduates pursuing certification through the provisions of State Board of Education Rule 6A-4.04(3). The evaluation shall be designed in such a way as to assure that the wide diversity of teacher preparation programs offered in the state are adequately represented in the sample. The research design shall include comparisons of:

(a) Teacher effectiveness as provided by the Florida performance measurement system;

(b) Teacher certification examination results;

(c) SAT/ACT and CLAST scores;

(d) College grade point averages; and

(e) Pupil performance measures.

(6) Periodic reports of the effectiveness of the alternate certification program shall be submitted by the Department of Education to the State Board of Education beginning in January 1986, and a formal evaluation of the effect and value of the program shall be submitted in June 1990.

*History.—s. 58, ch. 84-336.*

**B3- Teacher Recruitment Center Contact Persons**

Mr. John Marshall or  
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**231.625 Teacher shortage recruitment and referral.**

(1) The Department of Education, through the Center for Career Development Services, in cooperation with teacher organizations and district personnel directors, shall expand its career information system to concentrate on the recruitment of qualified teachers in teacher shortage areas.

(2) The Department of Education, through the Center for Career Development Services, shall establish a teacher referral and recruitment center which shall:

(a) Advertise teacher positions in targeted states with declining student enrollments.

(b) Advertise in major newspapers, national professional publications, and other professional publications and in graduate schools of education.

(c) Utilize a nationwide toll-free number and a central post office box.

(d) Develop standardized resumes for teacher applicant data.

(e) Conduct periodic communications with district superintendents and personnel directors regarding new applicants.

(f) Provide district access to the applicant data base by computer or telephone.

(g) Develop and distribute promotional materials related to teaching as a career.

(h) Publish and distribute information pertaining to teacher salaries and benefits for beginning and continuing teachers.

(i) Publish information related to alternative certification procedures.

(j) Develop and sponsor the Future Educator of America clubs throughout the state.

(k) Review and recommend to the Legislature and school districts incentives for attracting teachers to this state.

(3) The teacher referral and recruitment center, in cooperation with teacher organizations and district personnel directors, shall sponsor an annual job fair in a central part of the state to match in-state educators and out-of-state educators with teaching opportunities in this state.

*History.—s. 20, ch. 85-109.*



**State of Florida  
Department of Education  
Tallahassee, Florida  
Ralph D. Turlington, Commissioner  
Affirmative action/equal  
opportunity employer**

**FLORIDA: A STATE OF EDUCATIONAL DISTINCTION. "On a statewide average, educational achievement in the State of Florida will equal that of the upper quartile of states within five years, as indicated by commonly accepted criteria of attainment."**